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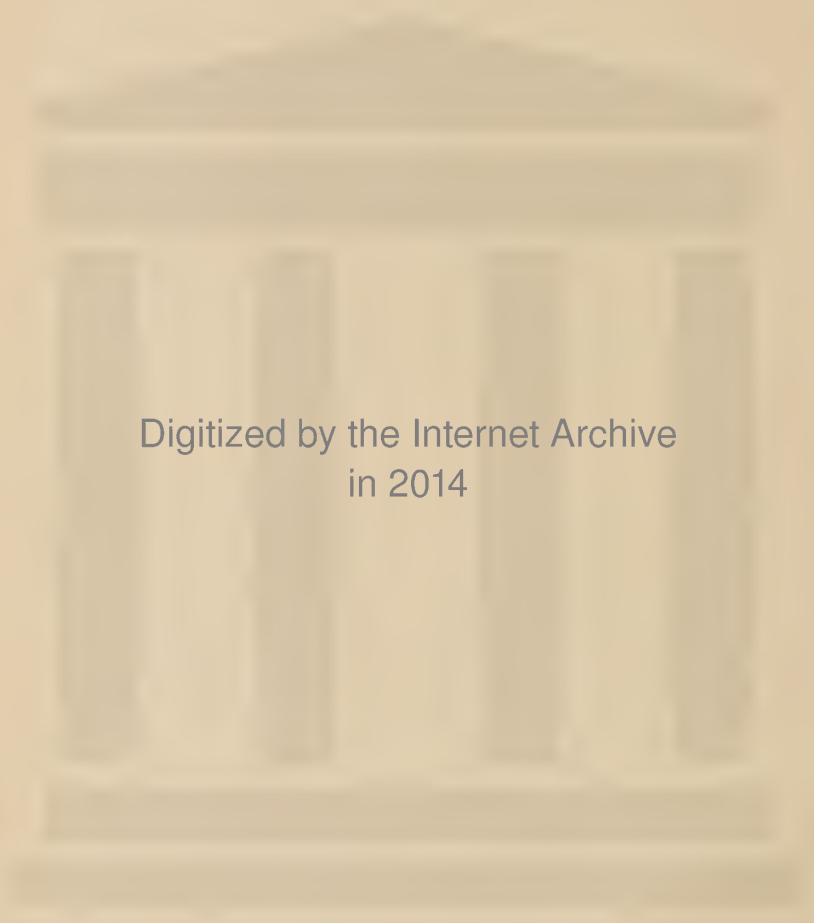
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THE
AMERICAN
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*A DIGEST OF CURRENT MEDICAL LITERATURE,
ABSTRACTS AND REVIEWS,—IN THREE PARTS:
MEDICINE, SURGERY, DISEASES OF
WOMEN AND CHILDREN,
AND OBSTETRICS.*

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PART I.

MEDICINE.

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THE AMERICAN MEDICAL DIGEST.

1885.

M E D I C I N E .

CONSTITUTIONAL DISEASES.

Large Doses of Quinine in Typhoid Fever.

Dr. GEORGE S. HULL, of Chambersburg, Pa., publishes an article in the *Med. News*, November 15th, 1884, recommending the use of large doses of quinine in typhoid fever when the temperature gets very high. The mixture used the most frequently, and which caused the least complaint, was the following: $\mathcal{R}$. Quiniæ sulphatis, gr. xv-xlv.; pulv. glycy. ext., $\mathfrak{D}$ i- $\mathfrak{D}$ ij.; syr. simplicis, $\mathfrak{z}$ ss.; aq., q. s. ad $\mathfrak{z}$ j. M.

This was given at one dose, or in three doses, fifteen minutes apart, especially when the larger doses were used. When patients tired of this, ext. glycy. rad. fld. was substituted; it alters the color and somewhat the taste, still being almost equal to the former in disguising the bitterness. When these were refused, it was rubbed into a mass with glycerine (hydrochloric acid being added to increase solubility, and especially to reduce the bulk) and enclosed in gelatine capsules. In the one case in which it was given in the shape of suppositories

($\mathfrak{z}$ j. with gr. ij. pulv. opii, in two suppositories), it reduced the temperature satisfactorily, though not so promptly as when administered by the mouth. The hypodermatic method, being yet in bad repute as regards quinine, was not resorted to.

Morphia, in small doses, was frequently added when there was much restlessness or insomnia; it also seemed to heighten the action of the quinia, as has been claimed of this combination.

Where the stomach was very irritable, the following, with rare exceptions, was retained: $\mathcal{R}$. Quiniæ sulphatis, gr. xv-xlv.; pulv. glycy. ext., $\mathfrak{D}$ j- $\mathfrak{D}$ ij.; bismuthi subnit., $\mathfrak{D}$ j- $\mathfrak{z}$ j; liq. morph. sulphatis, $\mathfrak{z}$ ss- $\mathfrak{z}$ jss.; aq., q. s. ad $\mathfrak{z}$ j. M. Sig. At one dose.

Much importance seemed to attach to the time of administration; a dose of 18 to 24 grains early in the morning, when the temperature was 103° , generally reduced it two or three degrees, though in some cases it merely kept it from rising, which condition held for thirty-six to forty-eight hours, when the dose would have to be repeated and increased.

Typhoid Fever.

The treatment adopted by Dr. G. P. ATKINSON in typhoid fever, brain symptom (*Brit. Med. Jour.*), is to apply a blister to the epigastrium. This he has found almost always to quiet the delirium and relieve the patient.—*Med. Record.*

Icteric Typhoid.

Towards the end of June, 1883, in the city of Torre Annunziata, several cases of acute jaundice occurred. The cases became more frequent, and the local medical men differed as to the nature of the disease. The provincial Council of Health was, therefore, petitioned to name a commission to investigate the disease, which was described as *icterus gravis*, or as acute yellow atrophy of the liver, as icteric typhoid, or even as yellow-fever. *Post mortem* examination of several bodies showed hæmorrhagic spots, acute tumor of the spleen, slight enlargement of the liver. Bile flowed easily into the duodenum; Peyer's patches were rather tumid; the cortical substance of the kidneys was somewhat congested and colored by a greenish pigment, pulmonary hypostasis, etc. Evidently the disease was an infective fever of not well-determined type, having as its prevailing symptom hæmatogenic jaundice, and probably typhoid in nature. The disease did not acquire a contagious or epidemic character. There were only twelve cases in the course of four months in a town of 25,000 inhabitants. Of the twelve cases seven were fatal. According to Hirsch, this bilious typhoid has been often observed on the southern and eastern coasts of Europe, and in the islands of the Mediterranean. Dalmatia, Greece, Constantinople and Asia Minor have at various times been visited by it. A few years ago a similar outbreak occurred

in Ancona. As to the etiology, no specific cause could be found; but the unwholesome state of the town is enough to account for anything. The drinking water is brought to the city in an open aqueduct, into which is thrown every sort of abomination; the subsoil is saturated with filth; the houses are dirty; there are no means of isolating the sick; and no disinfection of places or dead bodies is practised.

Decoctum Limoni—An Antipyretic.

A decoction of lemons has been recommended by Tommasi-Crudelli and others in malaria, and now Dr. Lauchlan Aitkin, of Rome, in the *Brit. Med. Jour.*, gives it a wider therapeutic action and says that he has had good results from its use in gastric and enteric fevers, complicated with a malarial element towards their termination and in cases that might be called typho-malarial throughout. He lays great stress on the mode of preparation of the decoction. A freshly gathered and unpeeled lemon is cut into thin slices, which are put into three teacupfuls of water and boiled down to one cupful. This is allowed to stand over night in the open air and given the first thing in the morning after the liquid has been separated from the rind, pulp and seeds, by careful filtration and compression just before it is drunk.—*Med. and Surg. Reporter.*

A New Antipyretic Method.

Dr. PREYER (*Centrb. f. d. Med. Wiss.*), discovered, that the temperature in the rectum shows a decrease of from 3° to 7° in guinea-pigs, upon whose cutaneous surface a spray of lukewarm water has been playing for twenty minutes. It is possible that the fine spray of the atomizer, moistening the hair of the guinea-pig, causes such a rapid

evaporation that the temperature declines. Whether the same would happen in the human being, whose surface is so much larger, and whose integument is much less covered by hair than is the case with the guinea-pig, has not yet been determined.

It would be well to try the same experiment on the human being, for if successful, all the consequences would be avoided, which have so often followed the application of cold baths or of sheets wrung in cold water. While the latter method decidedly decreases the high temperature, for instance in cases of typhoid fever, in those in whom it was employed intestinal hemorrhages have more frequently happened than usually is the case in that disease. Should the application of lukewarm water, as practiced in the form of spray by Preyer on guinea-pigs, be followed by the same good result in human beings, the new method would be a decided gain.—

Med. and Surg. Reporter.

Turpentine Applications in Rheumatism.

CONSTANTIN PAUL (*Union Méd.*) speaks highly of the plan of enveloping the affected joints with thin flannel compresses (not thicker than "a sheet of paper") dipped in oil of turpentine. They should be covered with oiled silk or rubber cloth, and should not be kept on more than an hour, for fear of producing vesication.

Pleasant Antiperiodic.

A pleasant antiperiodic, especially for children, is as follows: $\mathcal{R}$. Cinchonia alkaloid, gr. xvj.; sodæ bicarb., gr. v.; aquæ menth. pip., $\tilde{\text{z}}$ ss.; syrup simpli., $\tilde{\text{z}}$ jss. M.—Sig. One teaspoonful, for a child about one year old.

Directions for proper preparing:

Dissolve the soda in the peppermint

water; put the cinchona in a small mortar and add, gradually, by constant trituration, syrup to about an ounce; add the soda solution, and pour into a two-ounce bottle; then, by triturating the remaining half-ounce of syrup in the mortar, all adhering cinchona will be thus incorporated, and the whole makes two ounces.

For an irritable state of the stomach, ether gtt. j. syr. ipecac., $\tilde{\text{z}}$ j. alcohol or spts. lavender comp., $\tilde{\text{z}}$ j. may be added.

—*Med. World.*

Rheumatism.

Try the following for a local treatment in rheumatism: $\mathcal{R}$. Chloroform, $\tilde{\text{z}}$ i.; gum camphor, $\tilde{\text{z}}$ $\frac{1}{4}$; ol. olivæ, $\tilde{\text{z}}$ ii.; aquæ amm., $\tilde{\text{z}}$ i.; tinct. opii, $\tilde{\text{z}}$ i. M.—Sig. Shake, and use as a liniment.

Koumiss.

Koumiss made at home costs about fifteen cents per quart. The following directions are given for its manufacture: Fill a quart champagne bottle up to the neck with pure milk; add two tablespoonfuls of white sugar, after dissolving the same in a little water over a hot fire; add also a quarter of a two-cent cake of compressed yeast. Then tie the cork on the bottle securely and shake the mixture well; place it in a room of the temperature of 50° to 95° Fahrenheit for six hours, and finally in the ice-box over night. Drink in such quantities as the stomach may require. It will be well to observe several important injunctions in preparing the koumiss, and they are: to be sure that the milk is pure; that the bottle is sound; that the yeast is fresh; to open the mixture in the morning with great care on account of its effervescent properties; not to drink it all if there is any curdle or thickening part resembling cheese, as

this indicates that the fermentation has been prolonged beyond the proper time. Make it as you need to use it. The virtue of koumiss is that it refreshes and stimulates, with no after-reaction from its effects. It is often almost impossible to obtain good fresh koumiss, especially away from large towns. The above makes it possible for any physician to prescribe it.—*Chicago Rev.*

Some Medical Delusions.

A correspondent of the *Med. Record* declares the following to be delusions, and our contemporary, after a careful examination of them, declares in favor of its correspondent's views. We have numbered these delusions, so-called, and beg to take exception, especially in the case of Nos 1, 6, 13, 17, 20 and 25. We are of the belief that there are few of our readers of any considerable experience who will not agree with us in thus doing :

1. It is a delusion that veratrum viride or aconite will abort croupous pneumonia or essentially modify its course; 2, that potas. chlorate is of any use in catarrhal angina; 3, that potassium nitrate is an anti-pyretic, anti-rheumatic, or (to any appreciable extent) diuretic; 4, that lime-water will, in practice, dissolve a diphtheritic or croupous membrane; 5, that nitrate of silver is of any value in epilepsy; 6, that the excessive and continued use of iron induces plethora, with dizziness, flushings and palpitations; 7, that iron should be given in phthisis; 8, that mercury is antiplastic and antiphlogistic; 9, that arsenic has any value in diabetes mellitus; 10, that potassium iodide promotes absorption of serous exudations and non-specific connective tissue in hyperplasia; 11, that sulphur and sulphur in baths is of any value in rheumatism; 12, that charcoal, when

moist in the stomach and intestines, has any absorptive power, or is of any use in flatulence by virtue of that power; 13, that dilute acids are "cooling," *i. e.*, lower temperature and lessen heart-action in the non-febrile; 14, that colchicum is of benefit in rheumatism; 15, that drinking sulphuric acid prevents chronic lead-poisoning; 16, that iodoform given internally, is anything but a poor substitute for potassium iodide; 17, that croton-chloral has a specific effect on the fifth cranial nerve; 18, that tannic acid (or the plants containing it) is of any value given internally for hæmorrhages, except, perhaps, those of the stomach and bowels; or, 19, that it is of any value as a gargle in chronic pharyngitis, or, 20, that it is an astringent to mucous surfaces and blood-vessels; 21, that turpentine is a stimulant to the heart and nervous system; 22, that musk is a nerve or heart stimulant (it belongs, with turpentine, to nerve depressants); 23, that ox-gall is of the slightest therapeutical utility at either end of the digestive tract; 24, that hydrocyanic acid in ordinary medicinal doses is either a local or general sedative (it is rather an irritant); 25, that quinine in either small or large doses is a stomachic tonic, except in convalescence from malarial attacks; 26, that hydriodic acid has any specific effects other than those possessed by the iodides.—*Med. Age.*

The Chloral Treatment of Diphtheria and Croup.

Dr. C. B. GALENTIN, in a monograph of some seventy-five pages, reviews the history of diphtheria, croup and plastic bronchitis, considers the various views of the authorities regarding their etiology and the various modes of treatment which they have practised.

He does not accept the theory that

diphtheria is caused by bacteria, believing that that theory ignores many important facts.

He denies the local origin of the disease, and maintains that only blood-poisoning, toxemia, can induce the phenomena of the disease. He does not advance any theory as to the real nature of the poison which induces the disease. Whatever its nature, however, he believes it is demonstrated that it may enter the system (a), possibly by direct contract; (b), through the circumambient air; (c), with the water that is drunk or the food that is eaten.

The important part of the book, however, is that in which, after reviewing the various methods of treatment which have been advocated from time to time by various authors and practitioners, Dr. Galentin calls attention to a mode of treatment by means of which he claims to have had no more than two per cent. of mortality in the treatment of over five hundred cases.

He bases his treatment upon the local application and internal administration of chloral hydrate. He states that during the last six years he has seldom used any other local application in cases of diphtheria than solutions of chloral.

He recommends the application, by means of a soft camel's-hair brush or a feather, of a twenty-five to fifty per cent. solution of chloral hydrate, which should be repeated two or three times a day. He has found this to cause a rapid disintegration of the false membrane, rather than a separation of it in mass. He recommends that externally the neck be enveloped in several thicknesses of soft, dry flannel.

In the constitutional treatment of the disease the author's chief reliance is again upon chloral hydrate, which, he claims, has specific virtue as a remedy against the diphtheritic virus. He

thinks this is explained in part by the power of chloral to check the formation of exudation and to prevent coagulation.

He advises it in all cases of this disease, and says that the dose must be regulated by the hypnotic effect produced. He claims the best results are secured when a moderate hypnotic effect is produced.

When the stomach is irritable and the administration of chloral is thus prevented for the present he administers a full dose of calomel and soda. Sometimes other anti-nauseant measures are necessary. If malignant or typhoid symptoms develop, the administration of pure whisky or brandy is indicated. This he has found to be less frequently necessary with the chloral treatment than with any other which he has used.

In nasal diphtheria he recommends the abundant injection of weak pure soap-suds two or three times daily, followed by a weak solution (three to fifteen per cent.) of chloral hydrate, carbolic acid, lactic acid, etc., the chloral being preferred.

When the larynx is involved he uses a dilute solution of chloral in the form of a spray, or preferably the vapor of lime and chloral, formed by slacking a pound of quick lime in a coffee-pot or an open-mouthed fruit-jar by pouring upon it a pint of water, in which is dissolved a dram of chloral. If a coffee-pot or similarly constructed vessel is used, the vapor may be directed into the patient's face by means of a rubber tube, so that it shall be fully inspired. In laryngeal cases this should be repeated every hour for ten or fifteen minutes.

Dr. Galentin believes that chloral is prophylactic as well as curative, and recommends its administration to those

who have been exposed to diphtheritic infection.

Certainly claims such as these should be carefully investigated, and if others shall meet with anything like such success as Dr. Galentin reports, he will have merited lasting honor from the medical profession of having originated a method of treatment for this dread disease so far surpassing any heretofore in vogue. —*Editorial in St. Louis Courier of Medicine.*

Diphtheria.

Dr. S. MURDOCK (*St. Louis Courier of Med.*): That diphtheria ever originated *de novo* is very hard to believe. It may be heresy to deny its sporadic nature, and I may be called a fossil because I deny spontaneity even in diphtheria; but still I hold to the old belief that everything must bring forth fruit after its own kind, and that diphtheria is the product of a contagion, a virus, or an organism which comes *from* diphtheria. If you ask how do you account for the solitary cases, I respond with the query, how do you account for solitary cases of small-pox, or measles, or scarlet-fever? or, how do you account for cockle-burr in a newly-plowed field, or mildew in a room kept clean for years, or infusoria in the cup of water set in the open air in summer; science so far has even failed to explain why we are not as liable to take small-pox, measles, mumps, etc., the second time as the first, yet we all know it to be a fact that we are not. The manner of communicating disease has also been a source of much speculation; yet we recognize the fact that diseases of like nature spring up in different parts of the country at the same time in isolated places, which when once started appear to be communicated from one to another.

In my private practice this fall and

winter I have treated seventy-eight cases that I term catarrhal diphtheria, recognized first by headache, tongue light-yellow or brown, velum slightly irritated, pulse 96 almost invariably, temperature $99\frac{1}{2}^{\circ}$, respiration 22; second, tonsils enlarged, one or both showing sometimes snow-white specks on the surface, at other times, yellow specks rather under the mucous membrane. I would also state that the breath is much like that in nasal catarrh, and urine shows albumen. The difficulty continues for eight days, gradually getting better, or on the eighth day takes on an aggravated form, when the neck will swell, breathing becomes difficult, and in some cases pus will be discharged—generally from the thyroid gland, and if not careful you will mistake the disease for quinsy. In some cases they will swallow with their eyes staring open, as in quinsy, but mostly by shutting the eyes tightly and shrugging the shoulders, as in malignant diphtheria. I believe diphtheria in its various forms is much more prevalent than the average practitioner imagines. I further believe that if it were recognized and treated more generally as I have indicated, as diphtheria in some of its forms, there would be fewer deaths. As for treatment, I would state that I have long since abandoned all swabs, and the use of tincture of iron, or iron in any of its forms, believing it to be one of the most mischievous medicines ever given in this disease, and depend principally upon chlorine mixtures and supportive treatment.

Pilocarpia in Exudations.

For several years Dr. De DOMINICIS in Italy has employed pilocarpia in pleuritic and peritoneal exudations, and his success has been so uniform as to induce him to consider the non-absorption in any such a case to be due to

some existing complication. He uses pilocarpia only subcutaneously. In his opinion it causes an increase in the heart's action, save during the period of active diaphoresis, when the pulse becomes slower. He has also discovered that the addition of quinine or caffeine diminishes the therapeutical effect of the drug. About a year ago some German observer reported that if jaborandi is given in a cup of strong coffee, its weakening influence on the heart is not noted, and in D.'s observations we now find an explanation of the doubtless correct statement.—*Med. and Surg. Reporter.*

Application for Diphtheria.

The following will be found a most useful formula: R—Liq. ferri sub-sulph., 3 iv.; acid carbol., 3 j.; sodæ sulphit., 3 iij.; glycerini, 3 ij.; aquæ, ad., 3 iv.—M. Sig.—Apply by means of a brush or swab every two or three hours.

Mercury in Pleurisy.

Dr. J. A. McDougall, of Edinburgh (*Practitioner*), believes that mercury will cut short the morbid action in pleurisy. In the case of a feeble and exhausted woman he gave blue pill gr. ij. with squills and digitalis ãã gr. j. night and morning, with the happiest results; and he concludes that if in a case such as this, the subject of which was a broken and enfeebled woman, in whom acute disease had already induced very pronounced asthenia, one can use with success a drug the debilitating effects of which form, in the opinion of many, the gravest objection to its employment, the field of its usefulness becomes, in his opinion, a great and wide one. So truly is he convinced of its value that for many years he has treated no case of pleurisy without its aid.—*Ibid.*

The Preventive Inoculation of Hydrophobia.

The *Medical News* says: The cable has recently brought to this side of the Atlantic news that M. Pasteur had discovered, isolated and cultivated, the virus of hydrophobia, and made protective inoculations with it.

The points of M. Pasteur's paper are as follows: The protective power of inoculations with attenuated virus is an established fact. The virus of rabies is attenuated by passing it by successive inoculations through the monkey. It is increased in virulence by similar passage through the rabbit or guinea-pig. In either case it can then be communicated to the dog in its modified state of virulence, either greater or less than original, producing in one case certain death, in the other protection. The plan of action proposed is to take the virus from a rabbit dying after inoculation at a period somewhat longer than the shortest (which he assumes to indicate the greatest virulence) and inoculate this successfully in other rabbits, inoculating in the first instance from it, and in turn from each of the series of rabbits, a dog. The effect, Pasteur asserts, will be to render the dog refractory to the rabies which occurs "on the streets," that is, to the natural as contrasted with artificial inoculation.

Pasteur next asserts: "By inoculations of the blood of animals, I have succeeded in simplifying very much the operation of vaccination, and in procuring in the dog the most refractory state." He expresses the hope that he will be able, by the application of his theory, to secure immunity in animals after they have been bitten. Finally, he says he would have been happy to have published this announcement only after his conclusions had been "controlled" by some of his colleagues, but for the

lack of sufficient material, and that he has asked the Minister of Public Instruction to appoint a commission to test the results of his experiments.

The scientific and humanitarian importance of this announcement is very great, and being coupled with the positive assertion of Pasteur that it furnishes an "infallible" means of preventing and curing hydrophobia, there is no wonder that numberless persons have applied to M. Pasteur and expressed their willingness to be inoculated with the modified virus which causes rabies. But, as the reaction which follows upon the dispelling of an illusion is all the greater the higher the illusion has raised the hopes of mankind, it may be worth while to call the attention of our readers to certain facts which ought not to be out of mind for an instant when weighing the claims of this promising announcement.

In the first place, it ought not to escape the notice of the careful observer that what Pasteur proposes in his paper is not a strict application of his own theory. He claims that passage through monkeys weakens the virus, while passage through rabbits strengthens it; and then he proposes protective inoculation with virus taken from rabbits, which is more virulent, not virus from monkeys, which is attenuated. In the second place, it will be noticed that he does not assert that he has in this way secured immunity against rabies a single time. He says he has *simplified the operation of vaccination by inoculations with the blood of animals*, and so has produced the most refractory state. He has not made, and does not dare to suggest, the application of his theory to the protection of human beings. And for animals he only hopes its application may prove effective to save after a bite has been inflicted. The request for the appoint-

ment of a commission to test the value of his hopes, indicates that M. Pasteur is willing to have it tested, but it would be a mistake to suppose it adds to its claim upon the acceptance of others *before the test is applied*.

There are other serious flaws in the argument of this paper, but we have not the time now to point them out. We pass to some general considerations as to the position claimed by M. Pasteur and his supporters in relation to this subject.

M. Pasteur has done a great deal to advance the study of what are called disease germs, but he has not had such confirmation of all his assertions as to warrant the acceptance of a strange statement from him before it has been tested and corroborated by others. In a variety of matters he has made extravagant claims of discovery, which have not borne the test of time. In regard to hydrophobia, it is not long since he made an announcement, as positive as this last one, which was very soon shown to be utterly erroneous. Even if this were not the case, one might look with some distrust upon the statements now made in regard to the curious weakening and strengthening of the virulence of the assumed virus of rabies by respective inoculations into rabbits and monkeys. In regard to this matter, the assertions of Pasteur lack the essentials of scientific accuracy. We have not yet been told the reason for calling rabid the dog from which he got the virus he first used. No one but Pasteur has seemed to show that this virus resides where Pasteur says it does—in the brain especially, and with peculiar virulence. On the contrary, as Pasteur does not appear to know, many other parts of the body, solids and fluids, have been inoculated with as great degree of success as he claims for his inoculations

with the virus taken from the brain, where he says it can be gathered in "perfect purity." Further, he, and those who follow his lead, find it convenient to ignore utterly the inoculation-experiments of such excellent observers as Hertwig, Wright, Galtier, Paul Bert, and Colin, which show that, whatever it may be which is produced by the inoculations of brain substance, this does not succeed as invariably in the hands of others as it does in those of Pasteur; that, when it does succeed, the result does not differ from what can be effected with many other matters from various parts of a subject supposed to have rabies, or from similar parts of subjects beyond suspicion of it; and that the result is probably a form of septicæmia, not rabies at all.

Bichloride of Mercury as a Local Application in Erysipelas.

Dr. EDWARD C. SMITH: Several interesting cases of erysipelas have recently come under my charge, in all of which I used a solution of bichloride of mercury, viz: $\mathcal{R}$ bichloride of mercury, gr. i.; aquæ, f 5 iv.; M.

With the usual constitutional treatment: Mur. tinct. iron, which I am accustomed to give in 10 to 20 minim doses every hour, according to the urgency of the symptoms.—*Atlantic Jour. of Medicine.*

Comparative Toxic Action of the Veratrum Alkaloids.

The alkaloids of veratrum are veratrine, sabadilline, sabatrine, and jervine. If we represent the toxic power of veratrine as 100, that of sabadilline will be 8, of sabatrine 6, and jervine 5. The indications in veratrum poisoning are to prevent absorption in the stomach by ammonia and the alkaline carbonates. To aid the heart by alcohol, injections of ether and cauterization. To prevent

asphyxia by artificial respiration and inhalations of oxygen, and to favor elimination by producing diuresis. The action of veratrine on the nervous system is but secondary.—*Physicians' and Surgeons' Investigator.*

Nitrite of Amyl as an Antidote in Strychnia Poisoning.

Dr. HOBART A. HARE publishes a paper on this subject in the *Boston M. and S. Jour.*, which thus concludes:

1. Nitrate of amyl does prolong life in strychnia poisoning, although its action is so fleeting compared to that of its adversary, that it can only be used to tide over the patient until more persistent remedies or antidotes, such as potassium bromide, or chloral, can be administered.

2. That it cannot be used by inhalation as an antidote with any chance of security from a fatal termination, owing to the facts regarding expiration before stated.

3. That the longer the nitrite is given after the strychnia the less good it will do, *provided* the strychnia has already shown itself by convulsions or otherwise. This is true not because the nitrite is less powerful after the first convulsion, but because death is more apt to come before the nitrite can fully act.

4. That the nitrite has to be given in such quantities and at such times that its full physiological action be present constantly, otherwise in the instant which may supervene between the after effects of one dose and the beginning of the next the patient may die.

5. That in cases of strychnia poisoning, the nitrite of amyl being used as an antidote, an injection of the nitrite should be given, and the patient kept moderately under its influence by inhalations until other remedies are obtainable.

DISEASES OF THE NERVOUS SYSTEM.

Neuralgia Treated by Cold.

The Paris correspondent of the *British Medical Journal* says that M. DEBOVE, physician at the Hospital des Tournelles, treats his patients suffering from sciatica by refrigeration. His method hitherto has been attended in some instances by immediate recovery, and in others rapid, though not instantaneously. Chloride of methyl, enclosed in a siphon, produces a temperature of 10° Fahr., sometimes of 59° Fahr. The former is the degree necessary. Cold is applied along the nerve affected, which is not distressing to the patients: one of them declared that ten applications of cold were preferable to one of the actual cautery. When the neuralgia presents limited areas of pain, the jet is directed on them. The siphon with the tube fixed to it amounts to six or seven dollars. The chloride of methyl costs \$1.25. M. Debove used Richardson's apparatus, but failed to obtain any results with it.—*Med. and Surg. Reporter.*

Neuralgia.

Prof. BARTHOLOW maintains that chloroform is less painful and more permanent in effect than is ether in the method of treating neuralgia by deep injection near the nerve, which he originated.—*Cal. and Clin. Record.*

To Cure Stammering.

Dr. RALPH RICHARDSON writes to the *Brit. Med. Jour.*, Sept. 27, 1884, that any one may be cured of stammering by simply making an audible note in expiration before each word. Stammerers can sing as easily as other persons. Jacky Broster, of Chester, who

made a large fortune by curing stammering, simply made his pupils say *her* before each word beginning with a consonant.

Nervous Prostration.

Phosphoric acid, dil. ʒ j; elix. calisaya, ʒ iv; elix. val. ammon. ʒ ij; glycerine, ʒ iij; sherry wine, ad. Oj. M. S. One to two tablespoonfuls three times a day.

Consequences of Hypodermic Injections of Ether.

A man, previously in very good health, was attacked by sciatica. The neuralgia was not very severe, but stubborn. Dr. BARBIER (*Union Med.*, 1884, No. 66,) injected a Pravaz's syringe of ether deeply into the tissues on the posterior part of the right thigh. A grave neuritis at once set in, followed by disturbances of general sensation and by degenerative atrophy of the muscles of the lower leg of the same side. During the progress of this ominous form of neuritis, small vesicles made their appearance on the inner side of the right ankle, and suddenly changed to a deep ulcer, perfectly painless and insensitive, but penetrating to the bone, and being surrounded by a great amount of infiltrated skin. Simple rest gradually caused the healing of the ulcer. Long-continued electrical treatment also brought about an improvement of the anæsthesia and the paralysis, but no complete cure. Trophic disturbances were wanting.

Hypodermic Injections of Strychnine in the Treatment of Paralysis.

Dr. GALICIER, of Versailles (*Moniteur de thérapeutique ; Bull. gen. de thérapeutique*), states that strychnine injected hypodermically in cases of paralysis produces a local as well as a general

therapeutic effect. The local effect is manifested more or less quickly according as the power of the muscle is completely abolished or only more or less impaired; in from one to five minutes in the latter case, and in from five to twenty minutes in the former. Sometimes, but rarely, the action is delayed until the second or third injection. In the latter case, the power of motion acquired does not at first last from one day to another, but a series of injections is necessary to fix it. The general therapeutical effect is shown progressively after a series of injections, and there is nothing special about it.

From a therapeutical point of view, then, strychnine by hypodermic injection acts like electricity in paralysis—an analogy long since known in general terms: it isolates muscular action and decomposes the motion—in a word, after the manner of electricity, it is an analytical agent in its local action, and a synthetical agent in its general action. These two effects combined act in concert in the cure of paralysis. Like electricity, strychnine encounters resistance on the part of certain limbs.—*N. Y. Med. Jour.*

Unnatural Swelling of Hysterical Hemiplegia.

Dr. S. WIER MITCHELL records in the July number of *The Am. Jour. of Med. Sciences* three cases of hysteria, in which there was unilateral increase in bulk at or near the menstrual period, and also at other seasons, after emotional excitement, and he has been unable to find elsewhere any narration of similar cases. Whatever conclusions we may reach as to the immediate cause of the unilateral differences in size, which Dr. Mitchell has here described, it is at least clear that they are under the influence of the nervous system, and vary with the causes

which also increase or lessen the analgesia, or give rise to chronic spasm. Beyond this Dr. Mitchell can as yet hardly go. Most probably, he thinks, it will be found in many unilateral hysterical palsies a like phenomenon exists, and has merely escaped attention because of being the least prominent in a group of symptoms. At all events, it adds another to the large group of resemblances which so closely relate organic to hysterical hemipalsy.—*Med. & Surg. Rep.*

DISEASES OF THE URINARY ORGANS.

Dyspnœa in Bright's Disease.

Renal asthma is occasionally heard of, and this really means the dyspnœa of Bright's disease, hence it will be interesting to read the conclusions of Dr. R. P. HOWARD presented to the late meeting of the Canada Medical Association. He believes:

1. That marked dyspnœa might occur in Bright's disease, not due to gross lesions in heart, lungs, or pleura.

2. That it might be (a) a continuous dyspnœa, or (b) paroxysmal in character, resembling spasmodic asthma; and (c) that these types might occur in the same case, but the continued variety was more frequent than the asthmatic.

3. That these forms of dyspnœa might occur as the prominent symptoms of renal disease, and their origin might escape recognition if the urine be not carefully examined.

4. That the Cheyne-Stokes' respiration was often a symptom of Bright's disease, and that it occurred both in acute and parenchymatous, and in the chronic interstitial nephritis.

5. That while the Cheyne-Stokes' breathing was usually an evidence that the fatal issue was near at hand, it

might occur in a chronic form, and might recur for weeks, and, perhaps, even for years.

6. That these several forms of dyspnœa were due to that defective renal elimination called uræmia.

7. That, in the acute form of Bright's disease, serious or fatal dyspnœa might sometimes occur in connection with effusion into the submucous membrane of the larynx—so-called œdema glottidis

A Good Diuretic.

The following combination recommended by Dr. FOTHERGILL, will be found a useful diuretic: *R.* Pot. citrat., $\mathfrak{z}$ iiss.; spt. juniper co., $\mathfrak{z}$ i.; tr. digitalis, $\mathfrak{z}$ iiss.; inf. buchu, ad., $\mathfrak{z}$ viij. *M. Sig.* One to two tablespoonfuls three or four times a day.

Catarrh of the Bladder.

The *Alg. Med. Zeit.* gives the following formula, used by ZEISSL in the internal treatment of catarrh of the bladder: Powdered leaves of *Herniaria glabra*; chenopodium, each, 5 grammes. Mix and divide into five parts. Add one part to a litre of boiling water. The infusion may be made more agreeable by the addition of milk.—*N. Y. Med. Journal.*

Irritable Bladder.

R. Amm. chlor., $\mathfrak{z}$ ii; amm. brom., $\mathfrak{z}$ iv.; infus. gentian comp., $\mathfrak{z}$ vi. *M. Sig.:* A tablespoonful three times a day.

DISEASES OF RESPIRATORY ORGANS.

Cardicentesis in Acute Pulmonary Congestions.

Dr. A. H. P. LEUF, having made a large number of autopsies in cases of sudden death, met with many instances

where this unlooked-for termination resulted from a peculiar form of pulmonary congestion not generally known. In this condition, the lungs are, as a rule, evenly congested throughout and of a very dark color, approaching blackness. The surface of the organ, while in this condition, may appear quite light-colored. The right heart is enormously distended with very dark blood, as are also its tributaries. The liver, spleen and kidneys participate in this venous stasis if the patient is plethoric. All the other organs are invariably extremely exsanguinated, except occasionally the brain.

Drunkenness, exposure, privation, cold and enervating influences generally seem to be the exciting causes. The disease *per se* is probably of nervous origin, beginning as a "blush of the lungs," due to a disturbance of the relation between the cerebro-spinal and sympathetic nervous systems. The damming back of blood in the lungs eventually causes an over-distention of the right heart and its immediate tributaries, terminating in the ultimate cessation of cardiac activity.

The symptoms, in the order of their persistence and value, are *unsatisfactory* respiration, an impending sense of death, occasionally cough, and probably dullness and crepitant rales. The mode of death is by heart failure, as indicated, and not gradual asphyxia. The average duration of the disease is fixed at about six or eight hours, although it appears in some instances to be only two or three, and in many continuing as long as forty-eight.

The treatment of this affection must be "*prompt, decisive and radical*," as it is so short in duration and so sudden in its termination. Only the promptest interference can save the patient. For these reasons, but one plan of treatment

promises relief and that is the performance of the operation of cardicentesis, as recommended by Dr. B. F. Westbrook. This operation produces no more pain and requires hardly any more skill than the ordinary administration of a hypodermic injection, and need never be done with the patient anæsthetised. Medicinal relief is unavailable because the circulation is too embarrassed to perform its ordinary labor. Phlebotomy is worse than useless, as it only aggravates the existing difficulty by exhausting the arterial side of the circulation without affording compensatory relief to the venous system. Moreover, aspiration of the heart is devoid of all danger, as has been repeatedly demonstrated with deliberation as well as by accident. It is a very simple operative procedure, only requiring the introduction of the needle through the right third intercostal space close to the sternum and directly backwards. The entrance of the point of the needle into the auricular cavity is recognized by the freedom with which it can be moved about and the lack of resistance, the same as in penetration of any cavity with fluid contents for exploratory purposes.

The objection to this innovation is based wholly on the fears of those who have not fully considered the cases in which it had been performed without any bad results. The lack of thorough anatomical knowledge also contributes very largely towards, often making even so-called bold surgeons timid.

Muriate of Cocaine in Hay Fever.

Like all other new and fashionable remedies, the muriate of cocaine is being credited with the possession of a great variety of therapeutic properties. In addition to its anæsthetic effects, Dr.

F. H. BOSWORTH, of New York, writes to the *Med. Record*, that he has found that when applied to the mucous membrane it is followed in about twenty or thirty seconds by a very notable contraction in the venous sinuses underlying the part which it reaches; and as the application is continued over the whole membrane covering the lower and middle turbinated bones, these sinuses become so rigidly contracted that all the blood which they may have contained is absolutely expelled, and the membrane clings closely to the bony structures, which then become visible in absolute outline.

Therefore, he concludes, that we have a therapeutic agent of inestimable importance, and which he has every reason to believe will be efficient :

1. To control the exacerbation of hay fever.
2. To relieve the most distressing symptoms of an acute coryza, and curtail its duration.
3. To control the painful and distressing reaction which results from the use of caustics or instruments in the nasal cavity.
4. To completely empty the venous sinuses of the nasal mucous membrane, and thereby afford a thorough ocular inspection of the cavities.
5. To largely eliminate from our minor operations in the nasal cavities the troublesome hemorrhage which so often occurs, and to control epistaxis from whatever cause.—*Med. and Surg. Reporter*.

Cocaine in Laryngology.

Dr. EDMUND JELINEK contributes some interesting statements on this subject to the *Wiener med. Blatt*. As the result of numerous experiments in Schrötter's clinic, he says that, if the hydrochlorate of cocaine, either in pow-

der or in the form of a strong solution, is applied to the mucous membrane, a marked diminution of the sensibility of the parts is noticed within a minute and a half. A solution of one part in ten or twenty is recommended, the formula suggested being as follows: Hydrochlorate of cocaine, 1 part; alcohol, 2 parts; distilled water, 3 parts.

In examinations of the nose and larynx, it is sufficient to pencil the anterior and posterior surfaces of the soft palate, the posterior wall of the pharynx, and the base of the tongue, the process being repeated after the lapse of a minute, if necessary. The local anæsthesia continues for about ten minutes. Professor Schrotter speaks in the highest terms of the new remedy. He has produced most gratifying results by its use in cases of acute and tuberculous laryngitis attended with extreme irritation. Both Schrotter and Stork have removed papillomata from the vocal bands after inducing local anæsthesia, and testify to the value of the method.—*N. Y. Med. Jour.*

Iodide of Potassium for Asthma.

The *Union Medicale du Canada* gives the following formula, used by HUCHARD, in asthma: Iodide of potassium, tincture of lobelia, tincture of polygala, each, 10.00 grammes; extract of opium, 0.10 gramme; distilled water, 250.00 grammes. Dose, a teaspoonful morning and evening.—*Ibid.*

DISEASES OF CIRCULATORY ORGANS

Intermittent Pulse.

Dr. B. W. RICHARDSON, writing on this subject (*Asclepiad*), says: If it occur in infancy it is an important indication of the existence of serious nervous

derangement. Occurring in young adults, it has the same significance, indicating a commencing failure of power. In five cases he has known it to be the first physical indication of derangement of mind in which suicide was attempted. In persons advanced in life, and in persons prematurely old, intermittency is often the precursor of symptoms of nervous failure. Persons in whom there is permanent intermittent action of the pulse pass through all acute diseases with less chance of recovery than others of similar age and like constitution who have no such failure. The author also states that he has often noticed the hereditary character of the phenomenon. With reference to treatment, there is no known specific method. Excitement should be avoided, and in cases where there are symptoms of cerebral congestion depletive measures are proper. Nothing relieves the intermittent action of the heart so rapidly as alcohol judiciously administered, and *vice versa*. All alcoholic fluids as beverages should be avoided; but if demanded, half ounce of pure alcohol in warm water is often most effective.—*Med. Med. Jour.*

Agaricin.

PIERING (*Prager Med. Wochenschr.*) gives the results of a series of experiments with the drug. It was administered principally to patients with cardiac and pulmonary affections in doses ranging between one-twelfth and one-half of a grain. A slight increase in the frequency of the pulse was noted after its use, but no change in the temperature. Sleep was frequently induced. Unpleasant after-effects were never seen, as they sometimes are after the use of atropine. The following is a brief summary of the writer's conclusions: 1,

Agaricin is a safe and valuable remedy for the night sweats of phthisis. 2, It has no influence on normal perspiration. 2, In doses of one-sixth of a grain, frequently repeated, it causes a rapid diminution of the sweating, this effect beginning within five hours after its administration is begun. 4, No bad results follow its use.—*N. Y. Med. Jour.*

DIGESTIVE TRACT.

Symptoms, Diagnosis, Prognosis, and Treatment of Typhlitis and Perityphlitis.

We extract the following from a paper by Dr. LEONARD WHEELER in the *Boston Med. and Surg. Journ.* :

Symptoms.—An attack of typhlitis is more common in young males. It is usually abrupt, though often preceded by an irregularity of the bowels. At the time of the attack the bowels are usually constipated. Pain and tenderness are complained of in the right inguinal region, there is slight fever and probably vomiting, and the attack may pass off with no greater trouble than this. Such cases are considered common, and are often repeated in the same individual. I have never come across one, however, or if I have, have not recognized it. The attack may be something more severe than this, a tumor be demonstrable, the right leg drawn up, and the decubitus on the right side in order to diminish pressure on the diseased part. The great majority of *such* cases even recover without the formation of abscess or development of peritonitis, after a duration of from three or four to ten or twelve days, though an induration may remain for months.

Perityphlitis by no means necessarily implies abscess. The symptoms of the

most formidable cases are similar to the above, except in degree, until perforation occurs or an abscess forms. A perforation into the peritoneal cavity makes itself very promptly known by the symptoms of acute general peritonitis. A perforation into the post-cæcal cellular tissue is not so manifest, nor is it easy to know when suppuration begins.

Diagnosis.—The number of diseases with which typhlitis and perityphlitis may be confused is large, but in most cases it only seems necessary to have the disease in mind in order to discover it. Mr. Maunder, of London, was called to tap an ovarian cyst, and found a cæcal abscess. Dr. Fordyce Barker narrates two cases, both seen by eminent counsel. The first patient was the wife of a physician, who proved to have a pelvic hæmatocele, although the diagnosis had been perforation of the appendix. The second was daughter of a physician, who proved to have a perforation of the appendix when the diagnosis had been pelvic hæmatocele.

Prognosis.—The prognosis in typhlitis in which no perforation occurs is good. The patients almost invariably recover. When there is a perityphlitis not suppurating, the danger is from recurrences, in which suppuration may take place. Dr. Wm. Pepper has a paper in the *Transactions of the Pennsylvania Medical Society* for 1883, in which he lays particular stress upon this liability to recurrence, and gives one case of twelve relapses. If the disease goes on to perforation, then the result depends in great measure upon the course taken by the pus and the surgical means employed. A perforation through any part covered by peritoneum, including thus nearly all perforations of the appendix, is a desperately fatal accident. It is possible that adhesions precede the perforation, so that an opening is made directly or

through the medium of an intraperitoneal abscess into one of the hollow viscera or through the abdominal wall. If a perityphlitic abscess forms, the most favorable course for the pus is through the cæcum or rectum. Perforation through the abdominal wall is not so favorable. Of twenty-eight cases collected by Dr. Bull, of New York, eleven were fatal.

Treatment.—In non-perforative cases, if there is much pain and tenderness, opium is proper until there is less, then small doses of saline laxative guarded by a small opiate, for it is desirable to relieve the cæcum of contents, both for the sake of diagnosis (to exclude impaction) and to relieve the patient of pain caused by the distended gut. At the same time externally a poultice, ice, or counter irritation, may be used. Calomel is used by English practitioners generally, and is now and then mentioned by Americans. If an abscess is formed, it is to be evacuated immediately, and if there is a reasonable belief that pus is present, although no fluctuation is found, the surgeon is justified in or is required to test the belief by aspiration or incision. Upon the point of the diagnosis of pus, Dr. Sands writes: "Rigor, sweating, high temperature, acceleration of pulse, abdominal pain and tympanitis, and an increasing extent combined with diminishing firmness of the abdominal tumor, are the chief signs which indicate the formation of pus. But none of these signs is invariably present, and it would be a difficult matter to say which one of them is the most important. But although in the early stages of the disease it may be impossible to discriminate between the cases that are going to terminate by resolution, and those that are to end in suppuration, the latter may usually be distinguished toward

the close of the second week by the general unfavorable condition of the patient, who seems to be growing worse instead of better; whereas, when resolution is about to take place, the later course of the disease is comparatively mild and favorable." The smallest aspirator needle may be freely used to decide the diagnosis. The operation is done by making an incision parallel with Poupart's ligament through the successive layers of the abdominal wall until the fascia transversalis is reached; the pus is then sought by the needle if fluctuation is not present, and the abscess then opened sufficiently to allow the entrance of a finger to explore the cavity for foreign bodies. Fæcal odor and the presence of bubbles of gas in the abscess do not prove the existence of a perforation of the intestine, though making it very probable. It is well to be aware that a perityphlitic abscess may be quite behind the colon, and extending far upward toward the liver. In such cases it would have to be approached from the side. Dr. Noyes, of Providence, has tabulated one hundred cases of this operation. The mortality was fifteen per cent. In Dr. Bull's sixty-seven cases of abscess tabulated in 1872, before the operation came much into use, the mortality was forty-seven per cent.

In cases of perforation into the peritoneal cavity it has been proposed to make an abdominal section, clean out the cavity, and stitch the opening to the abdominal wound. But the difficulty of diagnosis is too great to allow of spending much hope upon this idea.—*Med. & Surg. Reporter.*

Mist. Tonica.

R. Tinct. nucis vomicæ, ℥ ij.; tinct. valerianæ, vj.; tinct. cinchonæ comp., ℥ xxiv. M. et fiat mist.—*Med. World.*

CONSTITUTIONAL DISEASES.

Post-typhoid Elevation of Temperature.

Dr. J. M. DA COSTA, M. D. (*Philadelphia Medical Times*) says: It has happened to me to see, both in this hospital and in private practice, a number of patients who, after passing through the course of the disease, still retained a fever-temperature; or if, as is much more usual, the temperature had for a time resumed its normal status, it went up again without a redevelopment of diarrhœa, the appearance of rose-spots, or the return of cerebral symptoms. I have seen it shoot up as high even as 105° , and almost as quickly go down again to the normal, or even below. It was only yesterday that I met a physician, in large practice in this city, who stated the case of a boy convalescent from typhoid fever, in which the temperature on two occasions went up to 105° , without there being any signs of relapse of the disease, and on both occasions there were no other manifestations of systemic disturbance, and the temperature soon went back again to normal.

In the case I show you this morning something of the kind happened. His history is a long one, of which I need only give you the outline. His name is Thomas T., twenty years of age, born in Ireland. He was admitted September 22, 1884, after five days' sickness with typhoid fever. He has been here for nearly three months. The temperature, with the usual fluctuations, returned to the normal at the end of four weeks; during this period he went through the regular course of a typhoid fever of rather more than usual severity. After he had passed the height of the disease his recovery was delayed by an attack of milk-leg. When this had subsided,

and his temperature had become normal, and had so continued for several days, he had a sudden rise of temperature to 104° one afternoon (November 3d), but there were no other symptoms of disorder, and on the next day the temperature was 100° , and afterward gradually subsided to normal. I find that the temperature again rose on the 20th of November to 101.5° ; subsequently it remained steadily high for nearly a week.

There is a class of cases, of which I have seen a number in former years of service in this hospital, in which there is a sustained fever-temperature after all the other signs of the disease have passed away and the patient is convalescent. In this class of patients I have seen the temperature fall from 100° to normal as soon as they were permitted to get out of bed. The temperature would apparently remain elevated indefinitely, without any other sign of disease, as long as they were kept in bed. This has taught me that in some cases, if you want to get them well, you must get them out of bed; too much coddling does harm. The sustained abnormal temperature makes the physician, nurse and patient afraid, though all the other appearances are favorable. When the patient is allowed to sit up, gradually extending the time, the temperature falls.

There is another class to which I wish to direct your attention. Of course it is understood that elevation of temperature frequently occurs from indiscretion in diet. These instances I need not refer to further. I merely mention them to complete the series. In this man the first elevation I referred to was caused by reading a book, and that in the boy had a similar cause. The boy was of very impressionable nature, and when a schoolmate called

upon him and insisted upon seeing him after his attack of typhoid fever, he became very much excited after his friend had gone away, and cried for some time. That evening his temperature went up to 105° . Mental emotion, then, may be a cause of high temperature during convalescence from typhoid fever.

This does not, however, completely cover the case before you. I took the patient out of bed, forbade any excitement or mental effort, but the temperature continued high, although he had no diarrhœa or other symptom of disease. Examining the case repeatedly, I could find nothing but constipation that was amiss. Upon looking carefully for a cause why the temperature remained elevated, it occurred to me that it might be due to constipation, the fever-temperature being caused by irritation of hard masses of retained fecal matter in the intestine. I ordered this man a daily enema and one drop of fluid extract of belladonna three times a day. This I had found in previous cases effective in correcting a tendency to constipation after typhoid, where irritating purgatives would be dangerous. Now here the effect was very soon apparent. I have to report that the temperature fell to normal as soon as the intestines were freely evacuated, and has remained so. He now has a daily movement of the bowels, feels well, though still weak; his temperature is 98.5° . He is no longer confined to his bed.—*Louisville Med. News.*

Ice-Water in Typhoid Fever.

In a clinical lecture recently delivered at the Pennsylvania Hospital, Professor DA COSTA brought before the class a case of typhoid fever in which the antipyretic effects of ice-water application

to the chest and abdomen had been shown to a marked degree.

The temperature in the case had been persistently high, reaching 104.5° , and at one time 104.8° , and rarely falling below 103° , even in the morning remission. Large doses of quinine were administered, but without their usual effect. The temperature still remained high. The propriety of immersing the patient in a cold bath was then discussed, but abandoned owing to his extreme weakness, and the distance from his bed to the bath-room.

Professor Da Costa then ordered his chest and abdomen to be kept covered with cloths wrung out in ice-water. This was done with the most gratifying results. The temperature fell from 104° to 102° , and then to $101\frac{1}{2}^{\circ}$. The other symptoms also began to abate.—*Med. Bulletin.*

Russian Baths.

In order to determine the influence of daily Russian steam-baths on the healthy system, Dr. V. V. GODLEVSKY (*St. Petersburg Inaugural Dissertation*) made a series of careful observations on two quite sound and strong men, who, for the first ten days, daily took a simple vapor-bath, and then, after an interval of another ten days, daily took a vapor-bath, with rubbing and beating the skin by a *venik* (a bundle of birch twigs with leaves).

The effects, as enumerated by the author, were as follows :

1. The pulse and respiration considerably increased in frequency.
2. The circumference and expansion of the chest became somewhat larger.
3. The energy of expiration and inspiration decreased.
4. The capacity of the lungs decreased.

5. The axillary and rectal temperature rose.

6. The weight of the body fell considerably.

7. The volume of the limbs increased.

8. The circumference of the belly decreased.

9. The muscular strength of the hands lessened slightly, and that of the feet and abdomen considerably.

10. The daily amount of the urine decreased, but its density increased.

11. The excretion of nitrogen was considerably increased, the increase lasting for five days after completing a series of baths.

12. The excretion of phosphoric and sulphuric acids also increased, but less considerably.

The action of baths with the application of a *venik*, is more powerful than that of simple vapor-baths.

The author thinks that vapor-baths, administered daily for a certain more or less prolonged time, may prove useful : 1, as a means of intensifying the process of metamorphosis in tissues ; 2, as a powerful revulsive ; 3, as a sudorific ; 4, as a means of improving the action of the skin.

Accordingly, Russian baths are indicated : (1) in chronic muscular and articular rheumatism, as well as in gout ; (2) in secondary and tertiary forms of syphilis ; (3) in scrofula ; (4) in obesity and in plethora from overfeeding and sedentary life ; (5) in the initial stages of catarrh of the nose, throat, bronchi, lungs, bowels, and bladder ; (6) in chronic catarrh of the external auditory meatus (as recommended by Dr. Strom), the pharynx, tonsils, and nose ; (7) in chronic inflammation of the spinal cord and its membranes (as recommended by Bartels, Frey and Heiligenthal), and in hypochondriasis ; (8) in chronic congestion of the liver, spleen, stomach,

bowels, as well as in the algide stage of cholera ; (9) in rheumatic, scrofulous, and syphilitic disease of bones ; (10) in intermittent fever (in the stage of rigor) ; (11) in apyretic cases of ascites and serous pleuritis, and non-cardiac dropsy ; (12) in hydrophobia (Sanjez, Buisson, Turkish baths in hydrophobia were recommended by Dr. R. Neale) ; (13) possibly, in diabetes, as well as (14) in the cases where the formation of biliary and cystic calculi may be suspected.

The contra-indications for Russian baths are as follows : (1) All rather prolonged acute febrile diseases ; (2) tendency to hemorrhage ; (3) general weakness and exhaustion after acute diseases ; (4) acute affections of the eye and ear ; (5) uncompensated diseases of the cardiac valves, fatty degeneration of the heart, arterio-sclerosis of higher degrees, and aneurism ; (6) tendency to pulmonary and cerebral congestion, plethora of higher degrees ; (7) considerable pulmonary emphysema, phthisis in the last stage ; (8) obstinate constipation from atony of the intestines ; (9) pregnancy with tendency to abortion ; (10) very hot Russian baths are contra-indicated, also, in the cases of old people and infants.—*Ibid.*

Phenic Acid in Intermittent Fever.

Dr. DIEULAFOY read an interesting paper before his colleagues of the Société Médicale des Hôpitaux, upon the treatment of intermittent fever by phenic acid, and cited a case in point. A patient, aged 36, fell ill with ague of the tertian type, in 1877, for which he was treated successfully with quinine; several times the fever returned, and gave way each time to the same drug. Four months ago another attack came on, and the patient entered the hospital, under the care of the author. Subcu-

taneous injection of half a grain of phenic acid was administered the first day, and a grain the following days. After seventeen days of this treatment, the man was cured. He had absorbed in all fifteen grains in that time, without producing any symptoms of intoxication. M. Laveran refused to recognize the advantage of this treatment, adding that it had been already tried in America without result. In this opinion he was supported by another member. M. Huchard said that bromide of potassium was an excellent agent in intermittent fever. He had seen an Arab cured by the salt when every other method failed. M. Léon Labbé thought the phenic acid could render real service in intermittent fever, and he thought arsenic was too much neglected now-a-days.—*Med. and Surg. Reporter*.

Neutral Mixture for Fevers.

Prof. BRINTON speaks highly of the following neutral mixture in fevers of moderate type. *R.* Liquor ammonii acetatis, $\frac{3}{4}$ j.; liquor potassi citratis, $\frac{3}{4}$ j.; spiritus ætheris nitrosi, $\frac{3}{4}$ ss.; liquor morphi sulphatis, $\frac{3}{4}$ ss. *M.* Sig. Two teaspoonfuls three or four times a day. If the fever is of a higher type, and the pulse full and bounding, tinctura aconiti radicis $\mathfrak{M}$ xii.–xxiv. may be added to the mixture with advantage.—*Med. Bulletin*.

The Antipyrine Rash.

Now that antipyrine is coming into more or less general use as an antipyrctic, it may be interesting to state that several cases of an exanthematous eruption following its use have been observed in the clinics at Breslau, Zürich, and Strassburg, as reported by CAHN in the *Berliner klinische Wochenschrift*. The eruption appeared, without any subjective symptoms, in the form of

round, reddish, somewhat elevated spots, which disappeared on pressure. It was principally distributed over the back and the extensor surfaces; the head, the palms of the hands, and the soles of the feet were not affected. The eruption disappeared as soon as the use of the antipyrine was discontinued, but returned when it was resumed.—*N. Y. Med. Jour.*

Tongue Signs.

The following are the principal indications noticed by Dr. P. H. CROVIN, St. Louis, Mo.:

As an indication of fever, the condition of the tongue is not of a very great service; especially is this the case in typhoid fever, for whether we have a clean or coated tongue, should constipation be present, it should at once be relieved.

In my examination of throat troubles I frequently notice cases of furred tongue where the patient is in the enjoyment of excellent health. If no local cause, enlarged tonsils, etc., I always find that the coating is due to excessive smoking of strong tobacco.

A dry tongue is usually a sign of nervous depression, and is met with most frequently in fever; loss of sleep often produces this depression.

A hypnotic like bromidia soon restores the system to a better condition, and gives us a moist tongue; physiologically, opium would come in play here also, as it has direct action on the stomach as well as tongue.

In old age, the tongue is often noticed in a dry condition, and is not of the same diagnostic value as the dry tongue of youth or manhood.

A broad, pale, flabby tongue, which shows the pressure of the teeth, would plainly indicate a generally relaxed condition of the system with anæmia. I

have found a relaxed uvula an indication of a like condition.

One of the earliest signs of ptialism is a broad, flabby tongue. It also accompanies dropsical conditions of the system.

In advanced severe cases of diabetes, a valuable diagnostic sign is the beefy-looking tongue, with its smooth, shining, abnormally clean surface.

The irritable tongue is known by its prominent red papillæ and furred tip, and usually points to an irritated stomach, as in dyspepsia or alcoholism.

The same papillated tongue is met with in scarlet fever, and is then known as the strawberry tongue. It is caused by desquamation of the covering of the tongue. Sympathizing with the affection generally, we have a like desquamation of the kidneys, a sore throat, affected hearing, etc.

In cases where the tongue is covered with a slight froth and not much coated, we may look for the cause in great nervous prostration following excitement in persons of nervous temperament.—*Medical Brief.*

The Treatment of Rickets.

The *Centralbl. f. d. ges. Therapie* gives the following formula, suggested by LESSER: Tincture of rhubarb, 35; acetate of potassium, 32; wine of antimony, ℥ 75. Dose, five to ten drops three times a day, gradually increased to thirty drops.

The Use of Iodoform in the Treatment of Phthisis.

After a short review of the history of iodoform as a drug for internal administration, Dr. R. SHINGLETON SMITH, of Bristol, gave an analysis of the results of treatment in forty-six cases, arranged in tables to show the variation

in weight before and after treatment, in twenty-nine out of the forty-six cases, there was an absolute gain in body-weight, amounting in one case to thirty-two pounds, and in another to thirty-three pounds. Other indications of improvement were fall of temperature, diminution of cough and expectoration, cessation of night-sweats, improved appetite. The drug was given in doses varying from one to six grains five times daily, and was continued for several months. Toxic symptoms of a mild character had been observed in some of the cases. The paper concluded with a reference to the local use of iodoform in tuberculous disease of the larynx.—*Medical News.*

Erysipelas.

The following is one of Dr. SHOE-MAKER'S favorite prescriptions for this disease: R. Glycerine, ℥ ii.; tinct. ferri chlor, ℥ ii. M. Sig. Take from one to two teaspoonfuls in water every three hours until all local irritation subsides.

Treatment of Diphtheria with Quinoleine.

LEIFERT (*Berl. Klin. Wochen*): The author uses the following formula for a gargle in the treatment of diphtheria: R. Quinoleine (pure), 1 gram (= 15.434 grains); aquæ dist., 500 grams; spts. rectif., 50 grams; ol. menth. pip., gtt. ij. In a résumé of the cases which the author treated with this substance, ten showed marked improvement after twelve hours of treatment; swallowing became easier, and after forty-eight hours the false membranes disappeared. In one case, applications alone of the solution, led to a cure. Seven cases of diphtheria of severe form complicated with phlegmonous angina, and one of gangrene of the tonsils, demonstrated

that this substance possesses a remarkable antiseptic power. It may be used in the form of applications as a gargle, or may be taken internally, and is useful both for children and adults. It produces a burning sensation upon the mucous membrane, but this does not last long. The pain which is peculiar to the disease is relieved by this substance. The chief objection which is raised to its use is its very bad odor, but its energetic and undeniable antiseptic properties are sufficient to overcome this objection.—*Arch. Pediatrics.*

Hot Water as a Therapeutic Agent.

Dr. AMBROSE L. RANNEY recently published an extended study of the observed effects of hot-water drinking, the conclusion of which is as follows:

In summary I would urge a thorough trial of this therapeutical agent by the profession on the following grounds:

1. It is harmless if properly administered. A degree of temperature that can be endured by the mouth will not impair the integrity of the stomach. Absurd as it may seem I have heard this argument used by men of intelligence with every appearance of sincerity. Many of us drink coffee and tea at an equally high temperature, and in as large quantities as are compatible with the hot-water treatment.

2. Its effects are comparatively uniform provided it be given for a sufficient period. Exceptions prove a rule. Isolated cases may be occasionally encountered where the results as stated do not occur.

3. It seems to exert a curative influence upon many of the chronic diseases that influence and disturb the proper assimilation of food. Some of these are important factors in the development of nervous derangements. I re-

strict my statements for hot water as yet chiefly to the cure of these diseases, because I have not scientific data upon which to base a broader statement. Subsequent investigation can alone decide to what limits the remedial use of this agent should be restricted.

4. It appears that the curative influence of hot water is not usually transient. In many of my cases the symptoms have shown no tendency to return when once checked by its use, provided that the patient's indiscretions do not lead to a relapse.

5. It may be employed as an adjunct to all recognized methods of treatment, without detriment to the patient.

6. It exerts a marked influence upon vascular disturbances of the nerve-centres. Especially is this the case in my experience with those subjects that suffer from cerebral hyperemia and anemia. I have seen some remarkable results follow the protracted use of the hot-water treatment in headache, vertigo, neuralgia, insomnia and other conditions produced by vascular disturbances.

7. In diabetes and in some kidney derangements I have seen the most happy effects follow the internal administration of hot water. Its action as a diuretic is quite remarkable in some cases. It seems also to influence the secretion of urinary salts, since the specific gravity is modified often to a marked degree. The specific gravity of the urine is my guide in regulating the quantity of hot water for daily consumption.

8. As a laxative, hot water has a slow but decided action. The feces are at first rendered black from an excess of bile, but they gradually change to a yellow color, and become more like that of the infant. It seems to be a justifiable deduction, therefore, that the functions

of the accessory organs of digestion are made active by its use, and brought to the standard of health.

9. The skin is stimulated by the use of this agent and the cutaneous circulation is apparently made more uniform. I have seen the hue of the skin in disease altered by it and eruptions of a chronic character markedly benefited.

10. From a few experiments which I have made with reference to the effect of this agent as a preventive of seasickness, I am led to believe that it should be employed for from four to six weeks preceding an ocean voyage in accordance with the rules given earlier.

In conclusion I would state that if I have been led to express views that may appear extreme to many, it is because my convictions are based upon clinical observations of no inconsiderable magnitude. I have seen my previous failures in treatment turned by this agent into brilliant successes in some instances. In others, symptoms have been ameliorated by the use of hot water more rapidly than by methods of treatment universally recommended by textbooks. To what limits the value of this agent will be restricted, as a therapeutical adjunct, the results of collected observation and experience to date cannot fully determine. I shall await with interest the published results of the experience of others, who have doubtless employed this agent in various forms of chronic diseases, and especially those bearing upon the department of neurological medicine.—*N. Y. Med. Jour.*

On the Treatment of Chronic Rheumatism and Gout.

The following is an extract of a clinical lecture published by Prof. DUJARDIN BEAUMETZ (*N. Y. Med. Times.*)

To sum up, then, when you are called to treat an attack of gout, you will first

assure yourself of the integrity of the kidneys, then you will administer salicylate of soda in doses of from one to one and a half grammes, or, if you prefer, the tincture of colchicum seeds combined with quinine or strong tincture of aconite root. If, on the contrary, the kidneys are damaged, or if the heart seems to be degenerated, you will have to content yourself with giving alkaline dilutents and keeping the bowels open with saline purgatives; besides enswathing the affected member with wadding around which is placed oiled silk.

But it is not enough to combat the attack of gout, something must be done to prevent its return, and here we have many means at our command, both pharmaceutical and hygienic. Whatever theories may be admitted in explanation of uræmia, it is against this condition that all our efforts should be directed; here, then, is the place for the alkaline medication under all its forms. I will be more brief in the exposition of this part of my subject, because I have already, in a former lecture, spoken to you of the treatment of the uric acid diathesis.

All the alkalies may be employed, soda as well as potassa, but there is one that seems to me better than all the others, viz: "lithia," which Garrod recommends. I need hardly tell you that the dose of carbonate of lithia is seven or eight grains (fifty centigrammes) given at meal-time in carbonic acid water; the effervescent salts of lithia are good preparations. Benzoic acid and the benzoates have also been highly extolled, and combinations of benzoic acid with alkalies are in use, such as the double benzoate of soda and lithia, which is an excellent preparation.

By the side of the alkaline medication, certain tonics and stomachics

deserve a place, being much in repute. These are principally bitter preparations, furnished by our indigenous flora, constituting antiarthritic remedies more or less complex, such as (to name those most known) "electuary of Sydenham" which I have before mentioned, is considerable, and to give you an idea how numerous they are, you have only to refer to the electuary once vaunted by Sydenham (this electuary consists of twenty-nine articles). Among these plants I will mention only one—aconite, whose administration mitigates the pains from which gouty patients suffer; therefore, I think that it is always well to combine aconite with your colchicum. Alkalies have little curative action in acute attacks of gout, and constitute an adjuvant medication. During my trials with propylamine and trimethylamine, I obtained in certain patients (and in particular an illustrious marshal of France) disappearance of the gouty attack under the influence of these medicaments; but now, these ammoniacal compounds deserve to give place to a medicine much more energetic and certain, viz., salicylate of soda.

Salicylate of soda has an evident curative influence in gouty paroxysms, and it owes its action to several causes: first, because it favors elimination of urea and uric acid (you know, in fact, that salicylic acid is eliminated in the urine under the form of *salicyluric acid*); next, because this medicament is a powerful analgesic of the articular pains; and, finally, because it has an antipyretic action similar to that of quinine. Therefore, German Sée has rightly insisted on the advantages which may be derived from salicylate of soda in the treatment of attacks of gout, and here the rules of administration are the same as for acute articular rheumatism. But it is necessary in these cases to pay particular

attention to the state of the kidneys, for as I have already told you, the impermeability of the renal organs may render the administration of salicylates dangerous, and this it is that explains the divergence of opinions which have been put forth respecting the advantages and inconveniences of this medication in gout.

The external treatment of gout is a matter of much less importance than the internal medication. Many local means have been recommended in the acute paroxysms, from ointments and pomades in current use, to more complex formulas, and even to *horse-chestnut oil*; from applications as hot as can be borne, to the use of ice around the joint—all have been counseled in these arthritic inflammations. I believe, and in this I am supported by Garrod, that all these applications are useless, and even dangerous. It suffices to consider the state of those joints, the fiery redness of the skin around them, the pain of which they are the seat, to convince one that frictions of an irritant and the famous remedy of the "Duke of Portland." These nostrums, once the subject of much discussion, have now happily passed into oblivion, and given place to quassia and cinchona bark, which are of some little efficacy in atonic gout.

As you perceive, the pharmaceutical treatment of gout in the interval of the attacks is limited to the administration of alkalies in all their forms and bitters and other tonics. Add to these means the thermal treatment, which plays a considerable part in the therapeutic of this disease. Three stations among all those which have been considered as suitable for podagrous patients ought to attract your attention, viz.: Vichy, in France; Wiesbad, in Germany; Carlsbad, in Bohemia.

There has been much discussion concerning the mode of action, the advantages and disadvantages of Vichy water in gout. To-day this question seems to me decided, and I have already given expression to my views on this subject under the head of "renal lithiasis." It is not by neutralizing the excess of uric acid that these alkaline waters act, it is by their influence on the general nutrition, whose functions they regulate. But I am well aware that it will not do to exceed certain quantities, and that the treatment by alkaline mineral waters is not altogether unattended with evil. You should then send to Vichy your strong and plethoric patients whose nutritive functions are below par, and you should prescribe these waters to weakly patients whose attacks are but little accentuated—in a word, who have the symptoms of what has been described under the name of atonic gout and gouty cachexia.

The Carlsbad waters act like those of Vichy, always with this difference, that they are purgative. They suit admirably gouty patients with hepatic congestion and gastro-intestinal troubles, characterized by constipation or irritation of the stomach and bowels, provoked by excess of the table. Wiesbad belongs to the sodic chloride waters, and is applicable rather to the arthritic diathesis than to gout itself. The Aix la Chapelle waters, as well as those of Ems and Royat, which are all sodic chloride waters, act also by the lithia which they contain, and combat rather the multiple manifestations of the arthritic diathesis than the excess of uric acid itself. These are very useful spas, to which you would do well to refer a large part of your chronic rheumatic patients.

Hygiene plays a considerable part in the prophylactic treatment of gout.

Everybody is agreed that gout, aside from the laws of heredity, is the consequence of defective hygienic conditions, the uric diathesis, which is its starting-point, being an evidence that the azotized materials introduced into the economy there undergo an incomplete combustion. We have, then, two great factors in the pathogeny of gout: too abundant alimentation, too little muscular exercise. Gout is a disease of the rich, and this is a fact on which have insisted all writers from the most remote antiquity. You should, then, have a care over the alimentation of your gouty patients and proportion it to their muscular work. You should look after not only their solid food, but also their daily beverages, alcoholic excesses having an important influence in the etiology of gout. In fact, for ages attention has been called to the influence of spirituous liquors on the development of this disease. Wines that contain too much alcohol, as well as strong beers, should be interdicted altogether; although Garrod has condemned cider, I do not believe that this beverage can give rise to gout; I think there may be cases in which it may be beneficial.

But if the dietary of the gouty patient needs to be carefully regulated, it is just as necessary to prescribe suitable muscular exercise of all kinds; gymnastics, fencing, pedestrianism, all should be employed.

Paracentesis Thoracis as a Therapeutic Agent.

W. HENRY WHITE, M. A., M. D., Assistant Physician to the Royal Hospital for diseases of the chest, concludes the leading article on the above subject, in the *Brit. Med. Journal*, of Nov. 1, 1884, with the following "recapitulation of the points which are of importance in the treatment."

1. In pleuritic effusion, early evacuation of the fluid is advocated by the siphon principle, discarding the aspirator.

2. In empyema, pus should be withdrawn at once by the siphon or by the aspirator, with the use of the manometer, and the pleural cavity irrigated.

3. Incision is called for where large empyemata have existed for some time in old or rigid chests, or where irrigation, having been practiced several times has failed.

4. Where incision fails to effect a cure, resort must be had to resection of ribs.

5. Paracentesis, with drainage, should be employed in the treatment of lung cavities.—*Med. Med. Jour.*

DISEASES OF THE NERVOUS SYSTEM.

Gastralgia.

Clinical lecture by Dr. WM. PEPPER, published in *Medical Times* :

This man, a farmer, aged 39 years, has been sick for two years. His principal complaint is of pain in the left side. He has lived in a healthy locality, and has never had chills and fever. The pain begins in the left side and runs back to the left shoulder-blade. If he eats too much he suffers, but the kind of food taken does not appear to influence the pain. An ordinary meal does not make the pain worse, and eating sometimes takes away the bad feelings. Active exercise or riding over a rough road is apt to bring on the pain. The appetite is fair. The bowels are sometimes constipated, but as a rule he has diarrhœa about twice a week, there being two or three loose stools, but these contain no blood. He weighs one hundred and fifty pounds. His best weight was

one hundred and sixty-two pounds, but during the summer he goes as low as one hundred and forty pounds.

Let me here refer to this matter of variation of weight. Many persons will be met with who have a wide range of what may be called normal weight. I never like to see this symptom, for it seems to me that those persons who lose flesh so rapidly cannot be made of very good stuff. A person whose flesh is solid and who is living a correct life should maintain pretty nearly the same weight summer and winter, varying perhaps from three to five pounds. Persons will, however, be found whose weight varies twelve or fifteen pounds at different periods of the year. With such persons I have observed that sickness goes hard ; on the other hand, loss of weight in them is not to be regarded as of such serious moment as it would be in a person who was thoroughly in training and whose flesh was solid and well organized.

In reference to the pain complained of, when this pain is in the right side, we naturally suspect some trouble with the liver—a gall-stone in one of the smaller ducts or in the gall-bladder ; some congestion of the liver, causing dragging on the suspensory ligament, or irritation of the capsule of the organ. When the pain occurs on the left side, we think of the spleen, the pleura, and heart, and when, as in this man, the pain associates with some shortness of breathing and overaction of the heart, we are apt to think more particularly of the heart. Examination of the heart shows it to be perfectly normal. There is no enlargement of the organ, no displacement of the apex-beat, and the valvular sounds are free from murmur. Neither is there any evidence of chronic pleurisy. There is good respiratory murmur and resonance over the left side. Examination of the spleen shows that the organ

is not enlarged, and the man has not lived in a malarious district.

Before satisfying ourselves that this is merely a neuralgic trouble (possibly a form of gastralgia), some obscure conditions must be thought of. One of the most insidious of these, and one against which we should be continually on our guard, is caries of the spine. Caries of the anterior surface of the vertebræ constantly reveals itself by pain and distress in the neighborhood of the spinal column. Many cases of sciatica or intercostal neuralgia will be found to be due to caries of the anterior surface of the vertebræ, and the diagnosis should not be made until a sudden increase of the symptoms, with some numbness and failure of power in the lower extremities or the appearance of an angular projection, calls attention to the real cause of the trouble. You will do well to be on your guard against the occurrence of this obscure lesion. Aneurism of the descending aorta is another condition to be excluded.

There is no tenderness along the spine, neither is there any projection of the vertebræ, and jumping does not cause pain. No pulsation, thrill, or abnormal dullness can be detected. Caries of the spine and aneurism may therefore be excluded.

You observe that the pain is described as occurring in the right side and over the stomach; it is not markedly affected by eating, although radishes and some other articles make it worse, and it is worse when the stomach is empty than it is after an ordinary meal. It is associated with evidence of derangement of intestinal digestion, as shown by flatulence and irregular action of the bowels, sometimes constipation and sometimes transient attacks of diarrhœa. Having excluded the graver causes for this pain, we must conclude that it is

neuralgic and occupies the stomach, and therefore a form of gastralgia.

As to the cause of this, the family history is good, and he has had good health until this affection developed. He does not use liquor or tobacco; he has not been overworked, but has gotten into the habit of eating his meals hurriedly. The gastralgia has probably been brought on by this rapid eating.

In the treatment of gastralgia the regulation of the diet is the chief element. The stomach is rarely able to receive and handle enough of food in three meals to support the system; consequently it is important that such patients should take more than three meals in the twenty-four hours.

Again, the stomach is so hyperæsthetic and the mucous membrane so irritable that unless some digestible substance is in the stomach the acid juices are apt to excite pain, and hence the pain is more marked when the stomach is empty, and the ingestion of food affords relief; so that for this purpose, also, it is desirable to give food oftener than three times a day. Meals of smaller amount, and of extremely simple character, and at shorter intervals, is the rule for the nourishment of gastralgic patients.

The character of the food requires very close attention. In general, it will be found that milk is one of the best ways in which to give nitrogenous and albuminoid food. The starchy foods are, as a rule, well borne, particularly because they do not require much gastric digestion, being digested, as you know, by the salivary, intestinal and pancreatic fluids. At times, however, the starchy foods lead to the development of secondary acids in the stomach, in which case it becomes necessary to diminish the amount of starch allowed and increase the amount of skim-milk, the patient being practically placed on an exclusive

milk diet for a certain length of time. Alkalies are often desirable, and lime-water mixed with the milk is a convenient way of administering these.

I shall recommend for this man the following dietary :

Breakfast.—Soft-boiled egg, oatmeal, bread and butter, and milk with lime-water. Between breakfast and dinner, a glass of milk and lime-water.

Dinner.—Potatoes, bread and butter, milk and lime-water, but no meat. Between dinner and supper, a glass of milk and lime-water.

Supper.—Mush and milk, with milk and lime-water to drink.

In selecting the remedies to be associated with this diet, you will be governed by your appreciation of the state of the mucous membrane more than by anything else. If there is no evidence of gastric catarrh, if there is simply the hyperæsthetic neuralgia and anæmic condition of the stomach, iron, arsenic, and belladonna may be given at once with confidence, the stomach being sheathed with bismuth taken at proper intervals after eating. Under such circumstances, a pill containing the following might be given : *R.* Quiniæ sulph., gr. j.; acidi arseniosni, gr. $\frac{1}{10}$; pil. ferri carb., gr. j.; ext. belladonnæ, gr. $\frac{1}{10}$; M. et ft. pil. no. i. Sig.—To be taken after food, three times a day.

Any of the vegetable salts of iron may be substituted for the pill of the carbonate. In addition to this, ten grains of bismuth should be given two hours later, to protect the stomach when most empty.

If there be a catarrhal condition of the mucous membrane, as shown by a coated tongue, distress in the stomach, in addition to the paroxysmal pain and evidences of dyspeptic trouble, we are obliged to adapt our remedies to this condition, postponing the use of anti-

neuralgic remedies until the inflammation of the mucous membrane is relieved. In such cases bismuth with pepsin, dilute mineral acids, carbolic acid, and salts of silver become exceedingly valuable for their antacid, sedative, and alterative properties.

For this patient, having directed a careful diet with an alkali, we shall order minute doses of nitrate of silver with belladonna.

Two weeks later, the patient reported much improved, and the pill of quinine, arsenious acid, and iron above given was substituted for the nitrate of silver, the same diet being continued.

Treatment of Sick Headache.

Dr. RICHARD G. JACK reports this instructive case in the *Lancet* :

Mrs. N., aged 26, married, two children, had all her adult life suffered to some extent at the periods, and also was troubled with what is commonly called "sick-headache." She was treated by various doctors in the Western States of America, and at length she sought the advice of Dr. Thomas, of New York. He came to the conclusion that the only possible relief was to be obtained by removal of the ovaries; that she was then too much broken down for the operation; but after a trip to Europe had set up her health, he would, on her return, operate. I first saw the patient in June, 1883. She was then in the second day of the period, and under one of her headaches. These begin in one side of the head, and the pain gradually increases until the patient loses consciousness, the limbs become rigid, the hands clenched, the eyes half open and turned up, and shivering fits come on every few minutes. At other times the attack takes the form of spasm of the glottis. Seeing her first in one of

her severe attacks, I introduced my hypodermic needle, and injected one-sixth of a grain of morphine. I left the needle in, and in seven seconds relief was obtained; but as it was not complete, at the end of five minutes I gave the same quantity, and withdrew the needle. The pain subsided, and did not return during that period, but the patient suffered from severe sickness, which lasted thirty hours. In a few days I ordered iron and quinine, with shower-baths, good food, and early hours. When the next period was expected, I gave belladonna and bromide of potassium. As soon as the period came on, I kept the patient in bed, applied a blister of the size of half-a-crown over each ovary, and ordered a morphia pessary at night. The period passed over without a sign of pain or trouble. The tonic treatment was resumed, and the patient's health was steadily improved. The next period was anticipated a day or two with the belladonna and bromide, and when the flow began she was kept in bed the first day with half a mustard leaf over each ovary. No pain; period normal. On the next occasion, feeling the restraint irksome, and forgetting the date, the patient went to a theatre on the very night of the return of the period, and at 1 A. M. I was sent for. I injected one-third of a grain of morphia; the relief was instantaneous, and by increasing the dose to half a grain the sickness diminished. I tried the addition of atropine, but without effect. By persistence in the treatment, essentially the hypodermic, the patient is freed from headache, and no longer looks sick in mind and sick in body, having regained color in her cheeks. I have repeatedly seen the same good effect in ordinary sick-headache, either from hypodermic injection of morphia or from a dose of chlorodyne.—*Med. and Surg. Reporter.*

In Congestive Headache with Full Pulse and Flushed Face.

R. Amm. chlorid., 3 ij.; aqua font., 3 jv. Mix. Sig. Tablespoonful three times a day in wineglass of water. Or, R. Pot. iodid., 3 iss.; aqua menth pip., 3 iss. Mix. Sig. Teaspoonful in water once or twice a day.

DISEASES OF THE URINARY ORGANS.

Acute Bright's Disease.

Dr. Tyson, in a clinical lecture published in *Med. and Surg. Reporter*, speaks on the subject of treatment as follows :

Treatment.—A large number of acute cases will get well, if simply put to bed, kept quiet, and fed on milk. The irritability of the nervous system is increased in these cases; hence we must be very careful not to irritate the stomach, by unsuitable food, as this reacting on the nervous system may cause convulsions. Warmth in bed will favor the action of the skin, which will be aided by flannel underclothing. When first called to a case of acute Bright's disease, he gives a brisk purge; it is folly to give diuretics until you have given the purge, because they will not act. The purge may be citrate of magnesia, epsom salts, cream of tartar, or compound jalap powder. After the purge has acted, we can safely favor the action of the kidneys; but before giving any internal remedy for this purpose, he resorts to counter-irritation, with mustard plasters, cupping, or poultices over the loins. Of diuretics, he prefers digitalis, especially the infusion; the tincture is generally good, but is sometimes unreliable. To an adult we may give from two drachms to half an ounce, three or four times a day; digitalis is most use-

ful in large doses at long intervals. To a child of eight years of age, he would not be afraid to give one drachm of the infusion, three or four times a day, carefully watching the pulse, however; when it is brought down, he would cut off the dose. Water is one of our best diuretics; to which the citrate, acetate, or bicarbonate of potash makes a good addition; we may give from fifteen to twenty grains of either in half a tumbler of water every three or four hours; free dilution greatly aids the action of these salts. In most cases this treatment will be sufficient; when complications arise they must be treated. The most alarming of the complications is uræmia. When the urine is scanty or suppressed, we must look out for uræmia, and give brisk purgatives, with diuretics and sweet spirits of nitre to aid the skin in its vicarious function. When convulsions have supervened, of course the patient cannot swallow; if the pulse is full and bounding, he would bleed; only last night he had a case of convulsions, in a boy eight years old, that had lasted for eighteen hours; he took away eight ounces of blood, with most excellent results. Urea-charged blood causes the convulsions; by bleeding we remove some of this urea, and we also relieve the tension of the vascular system. We can also put a drop of croton oil, mixed with a little sweet oil on the tongue. Jaborandi is sometimes very useful; as the patient, under these circumstances, cannot swallow, we must give it hypodermically; $\frac{1}{6}$ to $\frac{1}{2}$ grain of pilocarpine (the active principle of jaborandi) will produce diaphoresis in fifteen minutes. In the adult we may use from $\frac{1}{3}$ to $\frac{1}{4}$ of a grain, though the dose must be regulated according to the physique of the patient, as it is a depressing drug, though Dr. Tyson is fearless of it, since he has never had any accident from its

use. To a child of eight years, he would give from $\frac{1}{10}$ to $\frac{1}{8}$ of a grain. It acts so promptly that we can afford to commence with very small doses and repeat them. It may be used by enema—taking two drachms of jaborandi leaves to one pint of hot water, steep for a few minutes, strain and inject four ounces, and repeat in fifteen minutes if no sweating has been produced. He has never known jaborandi to fail to produce diaphoresis.

Diseases of the Uric Acid Diathesis.

Dr. WM. B. GRAY. The careful record of these many cases shows that when the urine is of high specific gravity by reason of the presence of an abnormal amount of uric acid, Lambert's Lithiated Hydrangea, in my hands, has never failed to be of signal benefit. In cases in which the specific gravity exceeds 1015, it invariably gives good results.

Guided by these indications, I have successfully used this preparation for nearly a year in the various diseases produced by the well-known irritating properties of uric acid, finding that it acts like a charm in cystitis, excessive micturition, headaches, etc. I have also used it with satisfactory effect in many cases of gastric and abdominal dyspepsia, diabetes, Bright's disease, and rheumatism (particularly muscular). In fact, in all cases where uric acid is to be combatted Lambert's Lithiated Hydrangea will be found a potent remedy. I generally give 3i. doses four times a day.—*Lancet & Clinic.*

DISEASES OF RESPIRATORY ORGANS.

Iodoform in Tuberculous Ulceration of the Larynx.

DRS. KUSSNER, of Halle, and FRANKEL of Berlin (*Journal Med.-Chirurg. de*

Buda-Pesth), highly recommend the employment of iodoform in the laryngeal ulceration of the phthisis. The former uses a ten-per-cent. solution in glycerin, applied by a small piece of cotton, and also an inhalation three or four times a day of the following: $\mathcal{R}$. Iodoformi, one gramme; spts. vini, ten grammes; aquæ, fifty grammes. $\mathcal{M}$. This can also be used in the atomizer. It is claimed that under this treatment the ulcers clean off and proceed to repair, but the general condition is also much improved: (1) the cough is reduced and expectoration diminished; (2) the hectic fever is reduced.

Dr. KUSSNER, on the contrary, has not found that the physical signs of phthisis are modified, but, although iodoform cannot be regarded as a specific, some cases are much benefited, because it retards the evolution of the disease and causes the disappearance temporarily of some of the symptoms.—*Bull Gén. de Thérapeutique*.—*Ibid*.

The Treatment of Pulmonary Affections.

In a paper on the local treatment of the respiratory organs, in the *Liverpool Medico-Chirurgical Journal*, Dr. F. T. ROBERTS points out the importance of getting a patient to pay voluntary attention to the acts of breathing and coughing. In many acute pulmonary affections, it was better that the patient should be left at rest, and not be frequently made to breathe deeply for the purposes of clinical examination. On the other hand, there were cases in which it was important to recognize the necessity for energetic respiratory action, so as to open up and prevent the collapse of the smaller air-tubes and air-vesicles. The placing the patient in a suitable posture would materially aid in this matter, and sternutatories and

emetics acted in the same way. The line of treatment was indicated where there was a tendency to hypostatic congestion, also in some cases of phthisis, to prevent the possible risk of further infection.—*Medical and Surgical Reporter*.

Lotion for Nightsweats of Phthisis.

Dr. J. R. FOREST states in the *Lancet* that no internal remedies have the power of checking perspiration until the fever has subsided and the patient is exhausted. The following is a most efficacious lotion: $\mathcal{R}$. Sulph. zinc., gr. 4; tinct. belladon., 3 i; aquæ, $\bar{3}$ i. $\mathcal{M}$. ft. lotion. The body to be sponged with the lotion at bedtime.

It has proved serviceable in cases both of the incipient and advanced disease, the excessive sweating being often quite restrained after two nights' sponging.—*Med. Brief*.

DIGESTIVE TRACT.

Rectal Feeding and Alimentation.

Dr. WM. JULIUS MICKLE gives some very useful hints in a paper on this subject published in the *Journal of Medical Science*. In using nutrient enemata he advises that:

Alcohol should not be added to albuminous food.

If necessary, the bowels should previously be cleared out by a simple or aperient clyster, and a daily copious clyster is required in some instances. The bowels may have to be rested, but we must persevere if the first attempt fails. Where it is apt to return, the patient's best position to receive the enema is on the back or left side. The nozzle or tube should be comfortably warm, so should the food injected. The

amount injected may sometimes with advantage be small at first, gradually increasing from 2 to 10 ounces. If the foods are ejected, we may try the plan (Dr. Hine's) of depositing them higher up in the viscus by means of elastic tubing and a funnel. But plugging the anus is often necessary, and has been done in many cases.

Conflicting as are the results of experiments on the subject, he concludes that the rectum and colon digest but little, and that, even when inverse peristole is set up, the action of the bowel upon enemata is chiefly absorptive. If so, the food should either be introduced mixed with digestive substances, or else before administration should in some way or in some measure be digested, and ready for absorption into the venules and lymphatics of the intestinal walls.

The following methods are all considered good :

Leube.—Three parts of meat to one part of pancreas, both finely minced and mixed with a sufficient quantity of warm water for clysis. Carefully remove all fat and connective tissue. The hog's pancreas is the favorite.

Rennie.—To a basin of good beef-tea, add $\frac{1}{2}$ lb. shredded lean raw beef ; 3 j fresh peps. porci ; 3 ij. dil. hydrochloric acid ; warm for four hours ; stir frequently. Beaten egg or alcohol (?) may be added.

Catillon.—A saturated solution of 19° C. of peptone of meat, 40 grammes ; water, 125 grammes ; laudanum, 3 to 4 drops ; bicarb. of soda, 3 centigrammes.

Dobell.—Cooked, finely-grated beef or mutton, 1 lb. ; pancreatic emulsion (Lowry & Moore), 1 oz. ; pancreatic powder, 20 grs. ; pepsing (pig's), 20 grs. Mix quickly, add half an ounce of brandy, and warm water sufficient to bring it to the consistence of treacle.

Henninger.—Very lean meat, finely minced is placed in a glass receiver ; water and HCl. are poured on, and pepsine, at the maximum of its activity, is added. The whole is left in a water-bath or stove to digest for 24 hours at 113° F. ; it is then decanted into a porcelain capsule, brought to the boiling-point, and while the liquid boils, a sol. of sod. carb. is added to it, until it shows a very slight alkaline reaction. Then the boiling liquid is passed through a fine linen cloth. The liquid is reduced in bulk in a water-bath. White sugar is added before administration.

Mickle.—A pint of milk, with one-fifth or one-fourth of a pint of water, is carefully heated to 140° F. Two drachms of liquor pancreaticus (Benger's) and 20 grains of bicarbonate in solution in one or two ounces of water, are added. The whole, in a covered vessel, is kept near the first at 140° F. for an hour or an hour and a half, then thoroughly boiled for two or three minutes. Thus prepared, the food keeps for half a day or a day.

In rectal medication, Dr. Mickle has made extensive use of enemata of chloral hydrate in many cases of epilepsy and of epileptiform seizures. He gives thirty grains dissolved in two ounces of water, and has found it very useful.

Obstipation.

The following will be found useful as an enema : R. Ol. racini, $\bar{3}$ ij. ; ol. terebinth, $\bar{3}$ i. ; aquæ, o. j. ; saponis cast., q. s. M. Sig.: For enema.

For Bleeding Hæmorrhoids.

R. Pulv. aluminis, $\bar{3}$ ii. ; pulv. camphoræ, pulv. opii, aa $\bar{3}$ i. ; unguenti, $\bar{3}$ i. M. Sig.: Ointment.—*Med. World.*

CONSTITUTIONAL DISEASES.

Thallin—Another Antipyretic.

The *Medical Press* thus refers to it :

Dr. VON JAESCH, of Vienna, has recently stumbled on still another synthetic antipyretic, which he introduced to the notice of the Society of Physicians of Vienna, on October 31st, the chemical name of which is zetrahydroparachinanzæ. The name, no doubt, is an excellent one for ceremony and great occasions, but recognizing that life is short, and not to be all spent in pronouncing names, he has mercifully given it the shorter one of thallin, by which it will be sufficiently well known if it proves to be worthy a name at all. He has already employed it in eighty-six cases of pyrexia of various kinds, viz., pneumonia, typhoid, erysipelas, measles. The fever was cut short with certainty, and without any disagreeable by-effect, but the effect upon the course of the disease was in other respects nil.

In doses of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ gm. the temperature fell several degrees. Of the various salts of the drug enumerated by him—sulphate, tartrate, hydrochlorate—he recommends the first-named for clinical purposes, and suggests that it may well be employed when all other antipyretics have failed.—*Med. and Surg. Reporter*.

A Good Fever Mixture.

When quinine is found to be injurious or ineffective, Dr. GIOVANNI recommends the following formula. *R.* Ergotine (Bonjean's), gr. xv.; tinct. valerianæ, f. $\frac{3}{4}$ ss.; aquæ, f. $\frac{3}{4}$ iij. *M.* S.—To be taken during the height of the fever or in the period of remittance.

Usually the good effects are obtained after one or two doses, but the remedy should be continued for some time after the subsidence of the fever. In rebel-

lious cases the author substituted with benefit cherry-laurel water, one-half to one drachm, for the valerian. The best results were obtained in intermittent fevers, but good effects were seen also in remittents, in the hectic of incipient phthisis, and even in puerperal fever.—*Ibid.*

Diagnostic Dreams.

Typhus fever is marked by short, delirious, broken dreams. Remittent fever by long, dolorous, painful dreams. Scarlet fever by realistic dreams, excited by surroundings. Herein are suggested some suitable points in diagnosis.—*Med. World*.

Fluoride of Quinine for Enlarged Spleen.

Fluoride of quinine has recently been recommended by Dr. WEDDELL, of Calcutta, in the treatment of enlarged spleen. He has investigated the action of fluoric acid and the fluorides, and has come to the conclusion that in cases of chronically enlarged spleens of malarial origin the effects obtained are often very striking. In very small doses the fluorides have produced marked benefit in cases of rickets and other diseases associated with malnutrition of the osseous system. Of the salts of fluoric acid, Dr. Weddell considers those of quinine or quinetum (*i. e.*, of the mixed cinchona alkaloids) to be the best.—*Ibid.*

Sweating to Death.

Such an unusual case as that which Dr. MYRTLE reports in the *Brit. Med. Jour.*, is worthy of comment. The patient, a healthy, active man, after suffering for three weeks from pain of rheumatic character, relieved by sodium-salicylate, was seized with profuse sweats, frequently of most offensive

character, and lasting at times for ten hours. Atropine and ergotine both caused sudden symptoms of collapse. He improved for a time on arsenic, and the perspiration lost its fœtor. He died from exhaustion 121 days after he had first felt the flying pains. No necropsy could be obtained. Dr. Myrtle regarded the case as one of paresis of nerves supplying the sweat-ducts, caused by frequent exposure to cold during his employment. Dr. Braithwaite, Dr. Hutchinson, and Mr. Wheelhouse related cases of excessive sweating, which in one instance was relieved by the external application of belladonna-liniment, and in another by taking copper-sulphate. Dr. Jacob thought the intermittency of the attacks precluded a peripheral paresis, and pointed rather to the sweat-centres being affected.—*Ibid.*

Incubation of Infectious Diseases.

VACHER divides these various periods into five sections, as follows :

1. *Shortest*—one to four days—cholera (malignant), charbon, plague, catarrh, and dissecting fever.

2. *Short*—two to six days—scarlet fever, diphtheria, dengue, idiopathic erysipelas, yellow fever, pyemia, influenza, pertussis, glanders, farcy, grease, croup, puerperal fever.

3. *Medium*—five to eight days—relapsing fever, gonorrhœa, vaccinia, inoculated small-pox.

4. *Long*—ten to fifteen days—natural small-pox, varicella, measles, rotheln, typhus fever, typhoid fever, mumps, malarial fever.

5. *Longest*—forty days or more—syphilis, and hydrophobia.

Small-pox ceases to be infectious in 56 days after the appearance of the eruption; modified small-pox in 35 days;

chicken-pox in 17 days; measles in 27 days; rotheln in 14 days; scarlet fever in 49 days; diphtheria in 28 days; erysipelas in 35 days; typhus in 21 days; typhoid in 28 days, and mumps in 21 days.—*Med. World.*

Hæmorrhagic Malarial Fevers.

Dr. T. F. WOOD, in an article published in *N. C. Med. Journal*, concludes as follows on the treatment of this disease:

The treatment of hæmorrhagic malarial fever, cannot be said to have attained much success. In some sections, where a milder form of the disease yields to treatment quite readily, it may flatter one to suppose that he has fallen upon a certain line of treatment, but a longer experience is sufficient to demonstrate the contrary. The statistical method of proving the value of this or that form of medication, is so far based upon too few cases of the disease. The tabulated cases given us in Sternberg on *Malaria and Malarial Diseases*, are less than 500 in all, nearly half of them being from French sources, but indicating that the preponderance of success was on the side of treatment by large doses of quinine. If the pathology of the disease is considered in its entirety, the administration of quinine in decided doses is brought forcibly to the mind. The danger of fatal termination has its source and origin in the splenic engorgement primarily, and secondarily in the congestion of the kidney; for as the cold stage of an intermittent merges into the hot stage, the spleen increases largely in volume, greatly contributing to the arterial pressure in the kidney, causing a rupture of the blood-vessels of the glomeruli. The object of all treatment, obviously, is the prevention of the return of the fever. As has before been

stated, the diurnal access of fever is more irregular and uncertain than in the ordinary forms of intermittent fever, and the administration of *quinine* cannot be so exactly timed as in that disease. It is absolutely necessary to cinchonize promptly and profoundly. Unfortunately, gastric irritation is a very common concomitant of the stage of fever. The thirst is intense, and the patient has an almost insatiable desire, and but little ability to retain water on his stomach. In this state of things the administration is seldom successful, because it is rejected by the stomach, and because the stomach has very limited ability to absorb it. Delay will be dangerous, therefore every possible avenue must be opened by which to get the patient under the influence of the drug, especially in the quotidian and double quotidian forms. Hypodermic injections would suggest themselves by reason of their success in other pernicious forms of malarial, but there is not a solvent which is not liable to cause serious abscesses. I have used all of the solutions I could find suggested—citric, tartaric, hydrobromic, sulphuric and finally oleic acid. The latter while it makes a good solution of the neutral alkaloid if dissolved, does not succeed very well in its administration hypodermatically, because it oozes back through the puncture. As mild as the oleate prepared in this way seems to be, it has in my hands raised large blebs, filled with lemon-colored serum. This avenue of access to the circulation is highly important, notwithstanding the many drawbacks, and can be trusted as long as the circulation is active. It is necessary to make enough punctures to introduce a drachm or more of quinine, as it is unwise to force into one puncture enough solvent to carry a drachm of quinine, as bad sloughing of the skin

will result, as I have had several times to regret. The abdomen and thighs are good points for puncture.

The endermic application of quinine is too slow a method of administration in this disease, even with the improved method by means of the oleate, although we might apply quinine with good promise of success, as was formerly done in pernicious fever, by denuding the skin with Granville's lotion, and applying the drug to the surface in any soluble form. The vesication would in most cases be desirable to relieve the irritable stomach. The introduction of large capsules of quinine is also a valuable means to induce cinchonism, as in this disease we are not often foiled by irritable bowels. A good way is to introduce ten grains of sulphate of quinine every three hours, anointing the parts well with lard or petrolatum.

It will be observed that only intense cinchonism can be relied upon, and as our patients will vary very much as to their degree of susceptibility to the agent it is necessary to have some standard to govern us. My rule is to keep the patient in the acute cases, in such a degree of cinchonism that they can just perceive the ticking of a watch at an inch. If this dozing may seem excessive, all doubt as to its propriety would be easily dissipated by observing a few cases at the bed-side. Destruction of the kidneys and spleen and obstruction of the liver, and a consequent fatal termination almost certainly follows if malarial poison is not extinguished by sufficient doses, and the danger of toxic effects from quinine is a remote contingency.

The hypodermic administration of morphine has been largely employed in this disease, but I believe without any good foundation in a knowledge of its pathology. When it is considered that the

vital powers are being rapidly diminished by the destruction of the red corpuscle of the blood, and by their drainage through the kidneys; that the depurative function of the kidneys is materially crippled, not only inferentially, but by the absolute detection of its presence in the brain and other tissues of the body after death; the spleen inflamed and enlarged beyond its compensatory volume, and its circulation impeded by deeply pigmented lymph cells and destroyed blood-corpuscles transformed into black pigment, and an interruption of its blood making function. The spleen is furthermore obstructed by the condition of the liver (congested and infiltrated with bile and granulo-fatty matter), as the course of the venous blood in this organ is through the *venæ portæ*, and not directly to the *venæ cava*. Therefore the introduction of a narcotic into the circulation, when the blood is laboring under the toxic presence already of effete material, seems to me to be irrational and unwarranted. I have given it in some of my cases of hæmorrhagic fever, with no ill results, but latterly, with a better knowledge of its pathology, I have been willing to give it up and surrender the slight advantage it gives by sometimes quieting the stomach, and by intensifying the quinine.

Mercurials.—Given in proper quantities and at the right time, no medicine can act a more satisfactory part than a dose of calomel. When the stomach is very irritable and the bowels inactive, given in combination with bicarbonate of soda in doses of 5 or 6 grains of the former to two or three times that of the latter, repeated in six hours when necessary, in most cases it relieves nausea and produces a gentle movement of the bowels. The dejecta are largely of old bile, which gives great comfort by lessening the engorged liver and emptying the

gall-bladder. In cases where the addition of soda would make the dose too bulky it may be omitted, but the result is not as satisfactory. A little experience with calomel in the early hours of hæmorrhagic fever, will bring forcibly to the mind of the practitioner the confidence which the older generation of doctors had, and still have in calomel. To the largest part of the present younger generation of practitioners the sedative influence over the stomach and the gentle cholagogue action of calomel, are unknown properties, but to see the clinical demonstration of the relief which calomel brings to cases in question—giving increased breathing space by reducing engorged viscera, there would be little question as to properties ascribed to it by our seniors. But calomel is given with no other end in view than the relief of nausea and as a bilious purgative.

Ergot.—The fluid extract of ergot would suggest itself as a very appropriate remedy by reason of its power of contracting the small vessels, and also for its reputed influence over leukæmia. So far as I have observed there is not much to be said in its favor. The fluid extract is the reliable preparation, and to give it in sufficient doses by the mouth is not very often feasible. Hypodermic injections of Squibb's fluid extract prepared by evaporation at a low temperature, and afterwards by solution in water, have not influenced the hæmorrhage from the kidneys, but I seldom neglect to employ this remedy, deeming a longer clinical experience necessary before condemning it.

External Heat.—The maintenance of external heat is of prime importance. Fatal depression will follow neglect of this precaution. The capillary circulation is very sluggish, and the functions of the skin greatly impaired. Dry heat

should be maintained by hot blankets and hot bottles, although the patient may declare that he is burning up. This part of the treatment is so obvious that it need not be dwelt upon, but merely add that a liberal quantity of crushed ice given from time to time will enable the patient to tolerate the irksomeness of it.

Alcoholics.—I have seen no good from alcoholics. Hot water is well borne by the stomach, produces a grateful stimulation, and with an occasional dose of carbonate of ammonia is far better than any form of alcohol.

Chloride of Potash.—This remedy has been employed with success by several physicians.

Position in hæmorrhagic fever should be strictly managed. The patient should not be allowed to attain the erect position, or even sit up in bed until convalescence has so far advanced that the heart's action is quite strong again. Death from heart failure is a real danger threatening those who disregard this injunction. So few persons will use a bed-pan, that it is best to relieve the bladder night and morning by a catheter.

Convalescence.—The management of convalescence is to be conducted with great care. A ferruginous tonic with arsenic and nux vomica should be continued for weeks, varying it from time to time, so that the patient will not be tempted to intermit his medicine. A change of air is very desirable and a good nutritious diet. Recurrences are so frequent in persons who have been attacked once, and the second and subsequent attacks are so much more dangerous by reason of the damaged constitution, that no efforts should be spared to see that the patient is fairly recovered before he incurs the risk of malarial influences again.

A Case of Chlorate of Potassium Poisoning.

Dr. A. H. P. LEUF, of Brooklyn, kindly sends us the following: It was in the fall of 1881 that a worthy professional friend called upon me with the request to make a post-mortem examination of a case he had been treating for sore throat. He had prescribed among other things, a solution of the chlorate of potassium for internal administration, with explicit and oft-repeated directions as to how it was to be given, and explained the results that might follow the ingestion of too large a dose. Not a little surprised was he, therefore, to be hastily recalled to see his young patient toward the end of the day, and still greater was his astonishment to find her in so precarious a condition that he was compelled forthwith to positively prognosticate her case as hopeless. The patient had all the evidence of a severe gastro-enteric irritation and passed bloody urine. It was found that during the day there had been taken by the young girl no less than several drachms of the chlorate of potassium. This remedy had been thus freely fed to her on the logical (?) ground that if a little did good more was better, and a great deal better still. However great may have been the doctor's regrets at the untimely yet inevitably approaching death, his concern was very much heightened when he considered the unfortunate circumstances that compelled him to impart to the mother the information that she was the slayer of her offspring. The whole family, too, was moderately well-to-do, and appeared at least as intelligent as the majority of this class are supposed to be. Thus is illustrated the importance of being always extremely careful to guard against similar errors. That everything was done to

prevent a fatal termination in spite of the unfavorable prognosis is almost needless to say. Nevertheless death occurred a few hours after the doctor had been so hurriedly called.

The autopsy was held about fifteen hours after death. Both kidneys were found in a condition of extreme active hyperæmia and the malpighian bodies appeared throughout the whole corticle substance as small black dots. It was also noticed that all the solitary follicles in the small intestines were distinguished by this same black color. The patches of Peyer were studded throughout by their composing follicles having the same dark hue. The bladder contained a small quantity of very bloody urine. The heart was flaccid and contained fluid blood. The other organs were comparatively normal.

The lessons to be drawn from this case are : 1. That one cannot be too explicit in giving directions to those having charge of patients; 2. That the chlorate of potassium *is* very irritating to the kidneys in large enough doses ; 3. That it has a depressing effect upon the heart ; 4. That it induces a dark discoloration, almost a blackening, of the malpighian corpuscles of the kidney and of the follicles of the small gut.

Just here it will be pertinent to mention the experience of Dr. Trail Greene, of Easton, Pa., upon the relative value of the sodium and potassium salts. His experience in this connection extends over a period of twenty years. He finds that the sodium salts are more soluble than those of potassium ; that they are less depressant to the heart ; that they are less irritating to the kidneys, and that, therefore, the chlorate of sodium and the iodide of sodium should always be used in preference to the chlorate of potassium, and the iodide of potassium. On account of

their increased solubility, the sodium salts are much better in many ways. They possess the virtues of the potassium salts in equal degree without being nearly as detrimental. Many cases of sore throat will respond well to a strong solution of the chlorate of sodium which are hardly benefited by a saturated solution of the potassium salt. Still one other point—the sodium salts are more acceptable to the stomach.

The Treatment of Hyperpyrexia by Cold Applications to the Abdomen.

In a recent clinic in the *Pennsylvania Hospital* reported in the *Col. and Clin. Record*, Dr. DA COSTA gave the following interesting cases :

The case now before you is one of typhoid fever, only remarkable for a sustained high temperature persisting in spite of various remedies. The temperature in the morning was 103° F., and occasionally 102 , in the axilla, but for nearly a week the temperature remained at 104.8° . As there had been no marked exacerbations in the temperature, we looked upon it as a case of grave character, on account of the sustained fever. With reference to the intestinal lesions, as manifested at least by the occurrence of symptoms of bowel disorder, they were not severe : he had only three or four stools a day. The eruption was well defined, but there is nothing in the case to which I wish to call your attention besides the temperature record.

Let us see his present condition. His temperature this morning is $100\frac{1}{2}^{\circ}$; last night it was $101\frac{1}{2}^{\circ}$. I, therefore, think that the disease is yielding. The bowels have not been opened for thirty-six hours, and tend to constipation. He is very deaf, but obeys intelligently when I can make him hear. His tongue is moderately dry and slightly fissured; it

is tremulously protruded. I want you to observe this cracked, dry condition, with the yellowish coating upon it; though it is not very dry, it still impresses you as a dry tongue. His abdomen is rather prominent and tender; a few spots of eruption are still visible upon the surface. There has been some atony of the bladder, so that the urine has had to be frequently drawn with the catheter. Examining his heart, I notice that there is almost complete extinction of the first sound; it can just barely be heard. The pulse beats only one hundred in the minute, even with the excitement of coming before you; but, as I see upon the record, it has never been a rapid pulse. It is compressible, but has decidedly more volume than it had a few days since. His general condition is improving with the reduction in the temperature. He has been taking dilute muriatic (gtt. v) and turpentine (℥ x) every two hours. He also takes twelve grains of quinine daily; and six ounces of wine and six of whiskey; therefore he is freely stimulated. His food consists of milk and beef tea, two pints of each in the twenty-four hours.

Now I have given you a statement of his treatment, with a single exception, and that is what I wish to develop in our discussion, viz.: the treatment of the high temperature. When I found that this man had, a week ago, an evening temperature remaining persistently at 104°, I tried to reduce it by large doses of quinine, sixteen grains daily; and on one day he took ten grains morning and evening. He was also frequently sponged with cold water. The effect was but slight; the temperature remained high. I then directed that cloths wrung out of ice water should be laid upon the abdomen until the desired result was obtained. It was found that this was more efficient,

and the temperature was at once reduced to 100°, so that by this means we were enabled to keep the temperature within bounds, and thus to gain time. We discussed the expediency of putting him in a bath, but, as he was very weak, and the bath room is some distance from his bed, rather than subject him to the risks of so much handling, we yielded the point, though, if the bath had been convenient, I would have preferred it. I wish to call your attention especially to the use of ice water applications to reduce temperature, as a substitute for the large doses of quinine and cold baths, which are not always convenient. It is a most instructive case. Indeed, I consider that the man's life has been saved by this means. Taking into consideration the rising temperature and the failing circulation, as shown by the impaired heart sounds, it did seem likely that the case would not get well. I would call your attention to the fact that in this case the quinine failed to reduce the temperature. It does not often fail, but it did here.

Another point is this deafness which you have observed. I almost had to shout to him before he put his tongue out. The resident physician tells me that he has been so since he came in; therefore it was not the effect of the quinine. Deafness in typhoid fever is not uncommon, and I may state that it does not contradict the use of quinine; by no means. It is due to the state of the blood and the impaired nervous system. We also note here that he has a constant tendency to stupor, is rather drowsy and heavy; he sleeps well at night without opium; he has not been delirious, and has not suffered with headache. The deafness, therefore, is the only symptom referable to the nervous system.

There is very little if any, jerking of the tendons, or tremor.

Now, gentlemen, with regard to the treatment I shall make a slight modification. Quinine need only be given in tonic doses. We will order him to take eight grains daily. The dry tongue indicates that the turpentine is still useful; the amount of acid is so small that it does not make much difference whether it be continued or not, but, as it is grateful to the stomach and aids digestion, we will continue it also. Sponging of the general surface with water will be done several times a day, as heretofore; and if the temperature again rises we will return to the ice water applications. With regard to the amount of stimulant, although it seems large, yet I will not reduce it, on account of his dry tongue and weak heart. I think that just now it would be dangerous to make any change.

Care of Typhoid Fever.

The following are a few of the points made by Dr. J. B. JOHNSON, in *Med. and Surg. Reporter* :

The patient should be placed in a large and well-ventilated room, containing only furniture enough for the comfort of the patient and the convenience of the nurse. The most airy room farthest from the ground floor is the best. Such a room is usually the freest from communication with the family, and will not only be most likely to insure plenty of pure air, but freedom from annoyance of the bustle and noise consequent upon the performance of household duties. No medicine whatever to act on the bowels other than the gentlest laxative should be given. Frequently individuals do themselves great injury by taking cathartic medicine in the beginning of the disease, and excite

an irritation of the bowels that often requires days to subdue. The physician frequently finds a very good case of typhoid fever spoiled by the patient having taken inordinate doses of calomel, castor oil, or compound cathartic pills, under the false impression that the disease can be carried off by purgation; but this is a very grave case, and now and then renders a case fatal. The constipation can be readily overcome by giving one grain of calomel in combination with one grain of rhubarb every hour or two until the bowels are moved. Inflammation of the bowels is always a serious complication, and a wise care does nothing to excite and everything to avoid it; and when looseness of the bowels occurs with or without blood, and adds to the patient's debility, I do not hesitate to give a pill after each action, composed of one-eighth of a grain of sulphate of morphia, one grain of powdered opium, and one grain and a half of sugar of lead. The action of this pill does not often disappoint me, particularly when given after each action and continued at longer intervals after the looseness of the bowels has been checked. The patient is usually delirious, and when so, some one should always be with him. He should not be left alone for a moment, for sometimes when alone he will get out of bed and try to make his escape, and in making the effort frequently hurts himself by falls or other injuries. Nothing has appeared to me to calm this disturbance of the brain so readily as five grains of bromide of potassium and two drops of tincture of iodine in a half ounce of sweetened camphor water every hour or two during its continuance. The hair should be cut closely to the scalp in the beginning of the fever, and the patient and his friends will not object to this if told that the hair will, of itself, fall out

on the disappearance of the fever. Cutting off the hair calms the patient, and allows a free application of cold cloths, and when the fever is high, no expedient so soothes as pouring, three or four times a day, two or three pitchforkfuls of iced water upon the head. This can be readily accomplished by holding the head over a bucket at the side of the bed, and the patient becomes so pleased with the operation that he will make no resistance to its repetition. When the hands are dry and hot, the whole body can be cooled by placing them in a towel wetted with iced water. These are slight duties, and can be repeated four or five times a day, and will add much to the means of calming the delirium and cooling the body. In the beginning of typhoid fever, and during its progress, there is more or less inflammation of the lungs, and this condition is not only indicated by a short hacking and frequent cough, but by the usual physical signs. This complication should be closely watched, for when serious the delirium is increased, and much danger added to the case. A teaspoonful of a mixture containing one drachm of iodide of potassium, twenty drops of tincture veratrum viride, one drachm of chlorate of potash, thirty drops of fluid extract of ipecac and twenty-five drops of fluid extract of lobelia, in four ounces of sweetened water, every hour or two, has a fine effect in allaying the inflammation and irritation about the lungs, and making the patient comfortable. The local abstraction of blood, the administration of quinine, and the application of blisters when properly indicated and timely used, are most powerful aids in the treatment of typhoid fever, and when intelligently administered, do in many cases much towards helping the patient to recover by their influence over com-

plications; but the proposition to doctor the fever itself, by scruple-doses of quinine, the wet sheet, and iced bath, is too extraordinary to call forth serious consideration.

Importance of Diet.—In consequence of the more or less trouble which is so apt to arise from an inflamed state of the bowels, no part of the care of a case of typhoid fever is of more importance than that of the diet; and neglect in this particular augments seriously the uncontrollable nature of the disease. The patient should not be allowed any other article of diet than pure fresh milk. No other drink except water should be permitted. The milk can be given iced or warmed, in quantities varying from a half to a glassful at regular intervals of two or three hours, allowing the quantity consumed in twenty-four hours to be from one to three quarts. The great advantage of milk is, that it is food already prepared by nature for the most delicate stomachs, and that, to a greater extent than any other known substance, possesses superior qualities so necessary to supply the waste of the body produced by the fever. Such mixtures as beef-tea or chicken soup should not be given during the presence of the fever. They are not only not digested, but act as an irritant, and frequently excite and continue diarrhœa. Wine, whiskey, and brandy, become sometimes of indispensable utility in extreme conditions of debility; but the probability is, that in no fever are the compounds of alcohol used with so little judgment as in this. In mild cases of medium severity, they should not be given at all; and when given they should be administered as medicine, in definite quantities and at stated intervals. As a rule, stimulants are not allowed unless the pulse at the wrist is weak and feeble, and

counts one hundred and twenty a minute; and if after their administration, the patient becomes flushed and excited, the quantity should be diminished and given at longer intervals, and discontinued as soon as soon as the emergency for their use passes off.

The patient should be kept both quiet and clean. His friends should be frankly told that the duration of his fever will probably be three weeks. This information will diminish their anxiety, and increase their patience. Quiet and cleanliness are the essential products of good nursing, and without them the sick chamber is deprived of its principal comforts. No visitors should be allowed in the sick room. The patient should be freed as much as possible from noise and annoyance, and the most scrupulous cleanliness in regard to his clothes and bedding, assiduously maintained. If very ill and helpless, two beds instead of one, placed side by side, should be used for the purpose of maintaining comfort and cleanliness. All soiled clothing of both the patient and the bed should be removed and placed in a tub of cold water as soon as they become soiled, and all discharges immediately carried out and disposed of, and the vessels so used well disinfected with carbolic acid after each emptying of them. These precautions not only add much to the ease of the patient, but contribute greatly to the protection of those within the house against the power of infection. This cautious care must be unremittingly continued during the progress of the disease; and when convalescence begins, the patient must not be allowed to return to ordinary diet and usual exercise for at least two weeks after the subsidence of all typhoid symptoms. The retreat of the fever leaves the mucous membrane of

the stomach and bowels in a most delicate condition, and its sensitiveness will not tolerate the slightest temerity in taking food. A single error or imprudence in diet sometimes produces either immediate death, or weeks of suffering from a dangerous and tedious relapse. Therefore, the convalescent should live upon the blandest diet. For the first two weeks he should be allowed nothing more difficult of digestion than milk, beef-tea, light broths made of chicken or lamb, rice, toast, and soft-boiled eggs, and these ought to be taken in moderate quantities, and at regular intervals. Should the milk curdle in the stomach, the addition of a couple of tablespoonfuls of limewater to each half-pint of milk, will correct any liability of the milk to disagree, and insure a safe and nutritious diet.

DISEASES OF THE NERVOUS SYSTEM.

A Case of Headache.

Dr. SUTCLIFFE HILL (*Med. and Surg. Reporter*): About two years ago I was called to see a young lady suffering from a very severe headache. She has the following history: She is 31 years of age, of small frame and short stature, dark and sallow in complexion, and of very sedentary habits. She has suffered from these attacks, which have been of the most intense character, since she was eleven years of age. At my first visit she did not weigh more than 95 pounds, her headaches occurred every week, and continued from one to three days at a time.

She was accustomed to using various domestic remedies, such as hot foot-baths, moist heat to her head, etc., with some benefit. I gave her at this time the usual remedies for headache, but

her stomach is so weak during the attack, that water will sometimes cause persistent vomiting.

I remember giving her at one of my visits a small dose of ipecac, as she complained of having eaten something that had distressed her, and she vomited for many hours. By careful attention to diet, and more out-door exercise, with at times tonics, she made some improvement, but still it was far from satisfactory.

Five months ago she informed me that of late she had suffered from constipation, and I prescribed the following pill.
℞. Ext. belladonnæ, gr. v.; ext. nucis vomicæ, gr. x.; ext. colocynthis, ʒ i.; sodii bicarbon., ʒ ii. M. et ft., pil. xl. Two each night.

She has gradually left off taking these pills, and the result has been in every way satisfactory. I advised at the same time the removal of her corsets, as she complained of a constant pain in the lumbar region of the spine, and I am pleased to say it has produced the happiest results. No less an authority than Dr. B. W. Richardson says, "The effect of the pressure is equally injurious to the organs of digestion, respiration, and circulation."

Since I adopted this plan of treatment, she has gained twelve pounds in weight; her food does not cause her any distress, and the headaches have left her, with the exception of a slight attack at the catamenial period.

But what seems the most remarkable in this case is, the pain in her back is gone, and the menses have been regular and without pain.

This is something that has not happened since she was first unwell. She has taken no medicine, with the exception of the pills for constipation, and it seems to me proven that the cause of her suffering was an error in dress.

I regard the removal of the corsets as the principal treatment in this case, and as the treatment was so simple, and the affliction so great, I trust my lesson may be of some use to others.

Cocaine in Sleeplessness.

Cocaine (or cucaine, as our English cousins call it) has been recommended for a variety of purposes; and now Mr. J. SWAIN reports the following cases in the *Brit. Med. Jour.*:

Case 1. A man, aged 33, suffering from aortic disease and albuminuria, had been troubled with insomnia for a fortnight. Three minims of a 4 per cent. solution of hydrochlorate of cocaine (equal to $\frac{1}{8}$ of a grain) were administered hypodermically. The patient remarked that "he slept better than he had done for a long time." The following night, one drachm of valoid of coca (a liquid extract, each drachm of which represents an equivalent quantity of the pure drug) was administered. The man did not sleep well. Two drachms of the valoid of coca were then given, and sleep was induced. The patient has continued to take this dose nightly for the past three weeks, the sleep being natural and undisturbed.

Case 2. Two drachms of the valoid were given with an equally beneficial result to a patient convalescent from an empyema, and suffering from sleeplessness.

Case 3. A woman, with tertiary syphilis, was kept awake by pain in a large rupial sore on the thigh. Two minims of the 4 per cent. solution of the hydrochlorate of cocaine, dropped on the ulcerating surface, relieved the pain, and the patient slept.

To show that coca and cocaine have no toxic action—at all events, in moderate doses—it may be worth mention-

ing that, in a case of rheumatism, the dose of hydrochlorate of cocaine was gradually increased to six minims ($\frac{1}{4}$ of a grain) hypodermically, and the valoid increased to five drachms, without any bad effect.—*Ibid.*

Kussmaul's Coma.

Before the Midland Medical Society, Dr. SAUNDBY read a paper on Kussmaul's coma, based upon two recent cases. He ascribed its symptoms, drawing attention to the peculiar character of the dyspnœa as constituting a distinguishing feature of pathognomonic significance. He especially insisted upon the fact that this form of coma was not restricted to diabetes, one of the cases related being an example of its occurrence in advanced renal disease. He referred to the various theories which had been advanced to explain it, and stated precisely the exact position of the acetonæmia question. He explained the methods used for testing for acetone, and showed Nobel's test with nitro-prusside of sodium and ammonia. In his opinion, the symptoms were due to the action of some poison nearly allied to acetone. He referred to Minkowski's suggestion that they might be the result of de-alkalization of the blood from the presence of some acid in great excess. After discussing the predisposing and exciting causes and the diagnosis, he pointed out that it was not invariably fatal. Treatment in the earlier stages should be eliminatory, by purgatives, if the bowels could be got to act, and later on the intervenous injection of a neutral saline solution should be tried. The result in one case was to restore animation for the time; and where recovery was possible, more permanent results may be expected.

DISEASES OF RESPIRATORY ORGANS.

Local Asphyxia of the Extremities in an Atheromatous Woman.

Deutsche Med. Ztz.—A woman, aged 68, who had suffered much from malarial fevers, was not nervous, and had not menstruated in 20 years, had local asphyxia in all four extremities. Blood-vessels strongly atheromatously degenerated. Gradual changes of temperature in hand and feet brought out the symptoms of local asphyxia, they became cyanosed, a sensation of crawling, piercing and numbness, icy coldness. Plunging in warm water gave temporary relief. It is thought the occlusion of the arterioles is caused by the atheromatous process, and the hyperæsthesia of the vaso-constrictors; the last is probably dependent on malaria. The last hypothesis induced the exhibition of quinine in combination with the constant current.—*St. L. Med. and Surg. Journal.*

The Treatment of Acute Laryngitis.

Dr. JOHN M. KEATING tells us in the *Archives of Pediatrics*, that he has frequently found the following treatment very efficacious:

In conjunction with a hot foot-bath, the temperature of the water as hot as the hand can bear with comfort, and the feet afterwards wrapt in flannel or Canton-flannel night-drawers with the feet of extra length and sewed up at the extremities, he prescribes the following in a half tumblerful of water: $\mathcal{R}$. Tinct. aconit. rad., gtt. iij.; spts. ætheris nit. dulc., 3 j.; syr. scillæ co., 3 j. This is given in frequently-repeated dessert-spoonful doses throughout the night. A soft handkerchief wrung with ice-cold water and surrounded by a silk one or a piece of flannel is applied.

If the cough continues, and becomes bronchial, it is well to produce a certain amount of counter-irritation of the chest. Ordinary camphorated oil is about the best. In addition to the ipecac, we should recommend small doses of castor oil, the object being to relieve the congestion of the bronchial mucous membrane by acting on the intestinal mucous membrane.

Tonic Cough Mixture.

R. Syrup. scillæ ; tinct. opii camph., aa ʒj.; vini antimonii, 3j.; ext. glyrrhiza fl.; balsam copaibæ, aa ʒiij. M. Sig. Dose, a teaspoonful every two, three or four hours, as the case requires.—*N. E. Med. Monthly.*

DISEASES OF THE URINARY ORGANS.

The Alkaline Treatment of Diabetes.

DR. MINKOWSKI (*Archiv. fur Experimentelle Pathologie*), says that large quantities of oxybutyric acid are sometimes present in the urine of diabetics, and the two cases in which the presence of this substance has been carefully noted died of coma. He suggests that the cause of death was the loss of alkali from the organism, due to the presence of the large quantity of acid. Walter has shown that the introduction of acids into the blood of herbivora causes symptoms like those of diabetes, especially the peculiar dyspnœa, but the same result was not obtained in carnivora, or in a man. But he has tried the effect of giving alkalies in a case of diabetic coma, by introducing a large quantity of sodium carbonate by the mouth and rectum. Although the patient ultimately died, he recovered consciousness, and expressed himself

better. The *post mortem* examination was negative. The results of Minkowski's research give additional support to the alkaline treatment of diabetes, which has enjoyed much repute. Le Nobel, in a recent paper says, that acetic, formic, and sulpho-cyanogen compounds, all of which may occur in the urine, give a red coloration with ferric chloride, which disappears on acidulation, but not on heating. This last characteristic is the only means of distinguishing these compounds from aceto-acetic acid, so that after obtaining the color reaction, the effect of heat must be tried, and wherever the color does not disappear, the presence of aceto-acetic acid must be regarded as doubtful.

The Diagnostic Value of Hot Urine.

Though we very much doubt its practical utility, yet we note from the *Deutsche Med. Zeitung* that Dr. F. BETZ says that the urine participates in the temperature of the bladder, which in itself does not develop heat. The temperature of the bladder, as well as that of the urine, can be altered, however, by the temperature of surrounding parts, which communicate heat to the bladder, and the urine contained in it. This occurs in inflammatory processes in the pelvis, and in the peritoneum not covering the pelvis, as in the loops of bowel lying in the cavity of the pelvis. When a patient complains of hot urine, and cystitis is excluded, inflammation somewhere in the neighborhood of the bladder is indicated.—*Med. and Surg. Reporter.*

The Detection of Mercury in the Urine.

According to Dr. SCHUSTER the ordinary tests are of no value in the detection of very minute quantities of mer-

cury in the urine. He recommends the treatment of the fluid to be examined according to the plan proposed by the chemist Herr Schridde. The urine is acidulated by muriatic acid and submitted to a current of sulphuretted hydrogen and then set aside to stand for twenty-four hours. The sediment which forms contains sulphide of mercury, uric acid, mucus, etc. This is separated by filtration, and both the filter and the sediment which it retains are treated by nitro-muriatic acid, and then dried until no more nitric vapors are given off. The residue is then dissolved in a small amount of water and the solution, slightly acidulated, is treated by the ordinary method of Furbringer. By this procedure it is possible, Dr. Schuster says, to detect $\frac{1}{100000}$ grain of mercury.—*Archives Médicales Belges*.

The Treatment of Polyuria.

LUNIN (*Jahrb. f. Kinderheilk.*), reports a confirmed case of polyuria in which the daily amount of urine was reduced within a week from eight to five litres by seven-grain doses of salicylate of sodium. Valerian was then given (an infusion of the root, 1 part to 20 of water), with the result of further reducing the amount to two litres and a half. Within three weeks the amount of urine fell almost to the normal, and there was a decided improvement in the general condition of the patient.—*N. Y. Med. Jour.*

Salicylate of Sodium in Acute Cystitis.

BORGEHOLD mentions in the *Deutsche Medicinische Wochenschrift*, twenty cases of acute cystitis in which he produced good results by the internal administration of this drug. During the first three days of the treatment he gives half a

gramme every two hours; for the succeeding eight days he gives the same quantity thrice daily. The writer asserts that with this method he is able to dispense entirely with irrigation of the bladder, and that in none of the cases thus treated has the disease become chronic.—*Ibid.*

The Treatment of Albuminuria with Chloral.

Dr. WILSON states, in the *British Medical Journal*, that he has treated a few cases of albuminuria with this drug, and has noticed that by its constant use he was able to cause a complete disappearance of albumin from the urine, the albumin reappearing as soon as the remedy was suspended. The theory of its action is not stated.—*Ibid.*

DIGESTIVE TRACT.

The Comma Bacillus.

The *Lancet*, November 29, 1884, contains the following:

We have received the following "conclusions" arrived at by Dr. E. Van Ermengen, after some researches upon the comma bacillus of Asiatic cholera, communicated to the Microscopical Society of Belgium, on October 26th. They will be seen to traverse most of the points in dispute, and to accord with Dr. Koch's results.

1. In the intestinal fluids of patients attacked with cholera (eight autopsies and thirty-four examinations of stools) there exists an organism identical with the comma bacillus discovered by Koch.

2. Its curved shape, its S-shaped, and chain-like groups, due to juxtaposition, and its occasional formation of slightly wavy filaments, give an assemblage of microscopical characters which render

it easily recognized from pathogenic micro-organisms hitherto unknown.

3. It is more or less abundant in the choleraic products according to the period of the disease and the time of examination. In too rapidly fatal (*foudroyants*) cases it occurred in the intestinal contents almost in a pure culture. In one case of short duration, where the patient had succumbed with very marked algide phenomena, there were very few comma bacilli to be found in the intestinal fluid. They disappear from the darker stools of the reaction stage.

4. It would have been very important to search for them in the dejecta of patients attacked with so-called premonitory diarrhœa, but our investigations were not brought to bear on this point.

5. In the single case of algide cholera, where microscopic examination failed to detect numerous comma bacilli, a culture of a small quantity of the intestinal contents on soiled linen in a damp chamber yielded an incalculable number of characteristic comma bacilli in twenty-four hours.

6. Microscopical examination of dejecta can suffice to establish the diagnosis of Asiatic cholera when preparations containing the different forms of comma bacilli in excess are obtained.

7. Bacterioscopic research supplies the deficiencies of microscopical examination in cases where the comma bacilli are scanty, and are even not found with certainty in the preparations. The characteristic aspect of their colonies, studied under a low power (150 diam.), renders them easy of recognition. The practical value of these culture processes on the glass slide in nutrient gelatine (10 per cent.) is well shown by our experiments. Mixtures of a very small quantity of the cultivation pro-

duct with a considerable amount of putrefied blood, stagnant urine, fæcal matter, hay infusion, etc., yield preparations where the typical colonies of comma bacilli have been detected with readiness in the midst of most varied vegetation.

8. The study of the morphological characters of the comma bacilli at different stages of development, cultivated in various media, chiefly in chicken broth and fluid serum, shows that they should be classed with true spirilla.

9. The most varying conditions of temperature and medium have not resulted in the discovery of a stage of spore formation; and their want of resistance to drying proves that they do not produce permanent germs.

10. Gelatine cultures cease to be inoculable six or seven weeks after having been sown. Agaragar cultures still contain living organisms after eight to nine weeks.

11. The temperature most favorable to their development seems to be that of from 25° to 37° C. Below 16° (between 8° and 15°) they are still developed, but with difficulty.

12. Their phenomena of growth and multiplication are extremely active. In from two to three days they completely liquefy many cubic centimetres of coagulated serum.

13. The curved bacilli of the saliva, discovered by Miller (March, 1884), and believed by Dr. Lewis to be identical with the choleraic comma bacilli, do not develop in gelatine, 10 per cent.

14. The cultures of the organisms, to which MM. Finkler and Prior attribute the production of cholera nostras, are impure. That which I examined contains two kinds of bacilli. Their mode of vegetation and the appearance of their colonies in gelatine differ from

those of the comma bacilli of Asiatic cholera. One of them gives to the cultivating medium a very characteristic greenish-blue fluorescence, which is wanting in the pure cultures of the comma bacilli.

15. Attempts at inoculation of the cultivation products have so far yielded very encouraging results in some species of animals, such as dogs, rabbits, and guinea-pigs. Three out of four guinea-pigs died in two or three days after the injection into the duodenum of one drop of a culture (fourth day) of the comma bacilli in liquid serum, after the method pursued by MM. Nicati and Rietsch, of Marseilles. The cadaveric appearances were those of cholera, and the intestinal fluids contained large numbers of comma bacilli.

16. The pathogenic action of these products of cultivation is very likely due to a zymosis, to an unstable albuminoid compound. Corpuscles of fresh human blood placed on Ranvier's heated platinum, and brought into contact with a drop of serum-culture, present characteristic changes wholly comparable with those described by MM. Nicati and Rietsch in their observations on the blood of choleraic cases.

17. The discovery of the comma bacillus is of the greatest importance in the diagnosis of choleriform attacks of doubtful nature which occur at the commencement of epidemics, and for the resort to more effective prophylactic measures which this early diagnosis allows.

18. The employment of bacterioscopic methods in the diagnosis of cholera does not offer any great difficulty in practice, and it would be very desirable, in view of the serious threats of an invasion of Belgium by cholera, that a sufficient number of physicians employed in the sanitary services should be initiated

therein with the least possible delay.—*Med. and Surg. Reporter.*

Treatment of Cholera.

In view of the expected visit of the cholera to this country during the coming year, any contribution to medical literature, bearing upon the treatment of this disease, should receive careful and earnest consideration on the part of the medical profession.

By the researches of Dr. Koch, it is now known that acids are most useful to kill the cholera microbe, and have been successfully employed by the profession in Europe.

Dr. CHAS. GATCHELL, of Chicago, in his "Treatment of Cholera," says: "As it is known that the cholera microbe does not flourish in acid solutions, it would be well to slightly acidulate the drinking water. This may be done by adding to each glass of water half a teaspoonful of Horsford's Acid Phosphate. This will not only render the water of an acid reaction, but also render boiled water more agreeable to the taste. It may be sweetened, if desired. The Acid Phosphate, taken as recommended, will also tend to invigorate the system and correct debility, thus giving increased power of resistance to disease. It is the acid of the system, a product of the gastric functions, and hence, will not create that disturbance liable to follow the use of mineral acids."

Dyspepsia.

The following will be found excellent in cases of dyspepsia, either chronic or acute: $\mathcal{R}$ Elix. pepsin $\mathfrak{z}$ iss., bismuth sub. nit., $\mathfrak{z}$ i., fl. ext., hydrast. canadensis, $\mathfrak{z}$ iss., Tr. lavender co., syrup. simplex, equal parts, q. s. ad., $\mathfrak{z}$ ij. M. Sig.—Teaspoonful 3 times a day before meals.—*Med. World.*

CONSTITUTIONAL DISEASES.

Glycerine for Dryness of Tongue and Thirst
in Febrile States.

From a foreign exchange we learn that Surgeon Major S. K. COTTER, in a recent number of the *Indian Medical Gazette*, relates the case of a patient suffering from enteric fever who was awakened every ten minutes by the dryness of his tongue, which was parched and covered with sordes. The tongue was painted with glycerine frequently, and the result was that at the first trial the patient slept almost comfortably, waking up about every two hours with the tongue feeling dry, but not really dry to the touch; after renewed application of the glycerine he at once slept again. In six other cases it has been tried and found satisfactory. Surgeon Major Cotter does not attempt to decide whether it acts by increasing secretion from the mucous membrane, dissolving the sordes, or making an artificial coating. But, in whatever way it acts, its benefit is vouched for when the tongue is parched during any disease.—*Med. and Surg. Reporter*.

Splenic Murmur in Intermittent Fever.

MAISSURIANZ (*St. Petersburg Med. Wochenschrift, Can. Med. and Surg. Jour.*) describes a systolic murmur which he has heard over the region of the spleen in patients with acute intermittent. He explains the phenomenon on the ground that it is probably due to dilatation of the splenic vessels following enlargement of the organ; it is also possible, he thinks, that the arteries may be subject to alternate contraction and dilatation, so that the blood meets with an obstruction in its flow through the spleen. The murmur is analogous

to that sometimes heard in the uterine sinuses during pregnancy. The writer maintains that this condition has never before been described. He has noticed the murmur in eight cases, all of which were acute. In spleens which were affected with permanent or chronic enlargement he has never been able to detect it. He considers its presence a diagnostic sign of considerable importance, and implies that such cases are most benefitted by a direct application of the interrupted current over the spleen.—*Weekly Med. Review*.

Treatment of Intestinal Hemorrhage of
Typhoid Fever.

At a recent clinical lecture, Professor DA COSTA exhibited specimens from a case of typhoid fever in which death had occurred from peritonitis, with three recent perforations of the bowel. The patient four days before his death had had a profuse intestinal hemorrhage. The distinguished teacher took the opportunity of indorsing the ergot treatment of the hemorrhage, but insisted upon the importance of following it up with decided doses of opium in order to prevent perforation or to limit its effect.—*Phila. Med. Times*.

Quinine in Typhoid Fever.

Dr. GOLDSCHIEDER, in the December (1884) *Deutsches Archiv für Klinische Medicin*, in an article upon the action of quinine in typhoid fever, says that undoubtedly quinine has an effect upon the "typhus curve" which is usually exhibited after each dose. This effect is neither specific nor absolute, but it requires certain conditions. It is dependent upon the quality of the fever. It does not in general break the typhoid fever, neither does it shorten it, but operates in diminishing the pyrexia. It

supports the remitting tendency, and it has a certain influence upon its exacerbation. In consequence of this, like every remedy, it has an uncertainty in its action, because its effect is dependent upon unknown conditions. In severe forms of the disease the therapeutic effect is in most cases unsatisfactory, particularly in the first half of the disease; during the second half it operates better. It is in the latter stage especially that its antipyretic effects are best observed. The general condition and the pulse also will be improved by its employment at this stage of the disease.—*Weekly Med. Review.*

On the Tolerance of Corrosive Sublimate in Small and Frequent Doses.

The above is the title of a paper by DR. A. H. SMITH, of New York (*Medical Record*) which contains an account of the treatment of eleven cases of various diseases with corrosive sublimate in doses of from $\frac{1}{2}$ to $\frac{1}{16}$ of a grain, largely diluted at intervals of one or two hours; and the effect noted with the following results:

In five cases there was no ill-effect produced, while in the remaining six cases, diarrhœa with griping occurred in one; bloody diarrhœa in two, and pytalism in two. In one case bloody diarrhœa occurred after seven hourly doses of 1-20 gr. the first day, and eight hourly doses on each of the four succeeding days; while in the other case it occurred after four days' administration of the drug in the same dose at intervals of two hours. In both instances the diarrhœa ceased immediately upon suspending the treatment.

Stomatitis occurred in one case after five days' use of the bichloride in 1-20 gr. doses, and in the other after two days' use.

In one case an idiosyncrasy caused

gastric disturbance and vomiting immediately upon taking 1-20 gr.; the distress recurred upon repetition of the dose some hours later.

In one case of phthisical diarrhœa no obvious effect was produced, the diarrhœa being neither increased nor diminished by hourly doses of 1-20 gr.

In two cases of children under seven years, doses nearly equal to those given to adults were tolerated remarkably well.

In three cases, one of chronic diffuse nephritis, one of scarlet fever and diphtheria, and one of measles, the drug produced a marked diuretic effect.

In one case of phthisical hectic the bichloride produced an apparently marked reduction of temperature.

Anæmia.

A favorite prescription of Prof. DA COSTA in marked idiopathic anæmia is: R. Ferri sulph., 3 j.; Potassi carb. 3 j. Ft. pil. No. x.—M. Sig.—One after meals for first week; increase dose in second week, etc. If the patient is a female, suspend treatment during menstruation.—*Coll. and Clin. Record.*

Diagnosis of Death.

The prize of 40,000 francs, offered by the French Academy for some certain test of death to prevent people from being buried alive, was given to a physician who announced that on holding the hand of the supposed dead person to a strong light, if living, a scarlet tinge is seen where the fingers touch, showing a continuous circulation of the blood—no scarlet being seen if dead. Dr. Max Busch announces that on contracting a muscle by electricity its temperature will rise and be shown by any small surface thermometer if the person is living; if it does not rise life is extinct.

Artificial Sea Air.

Many, indeed, are the luxuries that the magician's wand of invention now brings into the midst of our homes. As an instance, to produce a sea atmosphere for the sick room, a foreign contemporary suggests the use of a solution of peroxide of hydrogen (10 volumes strength) containing 1 per cent. of azonic ether, iodine to saturation, and 2.50 per cent. of sea salt. The solution placed in a steam or hand spray diffuser can be distributed in the finest spray in the sick room at the rate of two fluid ounces in a quarter of an hour. It communicates a pleasant sea odor, and is probably the best purifier of the air of the sick room ever used. It is a powerful disinfectant, the same author writes, as well as deodorizer, acting briskly on ozonized test solutions and papers. It might be well to test the subject in some ward of one of our hospitals.—*Scientific American*.

Diatetics.

Baked Milk.—Put a half gallon of milk in a jar, and tie it down with writing paper. Let it stand in a moderate oven eight or ten hours. It will be like cream, and is very nutritious.

Punch without Liquor.—Take the juice of six oranges and six lemons, adding sugar to suit the taste. Put to this a quantity of pounded ice and some sliced pine apple, pouring over it two quarts of water. This is an agreeable summer beverage for anybody, sick or well.—*Med. Call*.

Muriate of Cocaine in Gout.

Dr. D. D. DAVIDSON, of this city, informs us that he has in a few cases had most satisfactory results from the use of this drug in gout. He uses a two per cent. solution, which is poured into the

palm of the hand and then rubbed over the painful part. It only gives temporary relief, but this is a great desideratum and rather unusual, as so far this local anæsthetic has not had the credit of having any effect on the skin. He also tells us that when the pain returned it was less severe. He, too, has found this drug useful in earache.—*Med. Times*.

Pilocarpin in Erysipelas.

During a recent lecture, Prof. J. M. DA COSTA called the attention of the class to a new method of treating erysipelas by hypodermic injections of pilocarpin. This method, though new to the profession, has been used at various times during the last five years by Prof. Da Costa with good results. In the case presented before the class the action had been marvellous. The patient was admitted to the hospital two days before with a rapidly developing erysipelatous inflammation, due to a bruise received the previous night in a political altercation. His eyes were completely closed, his face was much swollen, red, and burning, and his temperature 102.8°. In addition, he had slept out all night exposed to the weather, and had evidently imbibed a superabundance of alcohol. It seemed to Prof. Da Costa that the chloride of iron treatment would be too slow in a case of this kind, so rapid in its progress, especially as it was one of the type in which cerebral complications are liable to occur. He accordingly ordered pilocarpin gr. 1-6, to be injected hypodermically. The result was more gratifying than had even been anticipated. In a short time profuse sweating had begun, which lasted for an hour and a half. During the sweating the temperature fell to 99°. The further development of the inflammation was stopped. The effusion

rapidly subsided, and when the patient appeared before the class there was not a trace of the disease left.—*Med. World.*

Erysipelas.

Give ten to fifteen drops tincture muriate of iron every two or three hours, and paint the parts as often with the following: $\mathcal{R}$. Acidi carbolici, 3 j.; olei origani, $\mathfrak{z}$ iv.; olei terebinthinæ, 3 ij.; olei olivæ, ad., $\mathfrak{z}$ iv. M.—*Ibid.*

Albuminate of Iron.

This is a solution of hydrate of iron in combination with egg albumen, and it is said to be more easily assimilated than any other preparation of iron. It is used in chlorosis, and in all cases of an anæmic character. In rachitis it should be associated with a minute proportion of phosphorus, and in all cases should be freshly prepared. The strength is about half a grain of hydrate of iron in a fluid drachm.—*New Eng. Med. Monthly.*

Carbolic-Acid Inhalations in the Treatment of Diphtheria.

Dr. LUDWIG STUMPF, of Munich, contributes a very valuable paper on the treatment of diphtheria to the December (1884) number of the *Deutsches Archiv für Klinische Medicin*. He concludes that the diphtheria of the throat, nose, vagina, and mucous membrane of all the air-passages is in the first place a local disease. Commencing as a purely local affection, it will progressively develop into a general systemic infection of the whole body. From the local nature of the infection, topical treatment of the disease is justifiable and in accordance with the opinions commonly held at present. If a local disinfection is accomplished soon enough in accord-

ance with the Listerian principle, all can be accomplished which is needed. The best treatment is the inhalation treatment. Up to the present time we have no remedy against the general systemic affection. The object of the physician should be to grasp the local primary disorder as speedily as possible, before the general system has been invaded. The importance of this primary treatment, therefore, cannot be overestimated. By neglecting the proper local treatment the general infection of the body will result, and when this takes place our medical efforts are often unavailing. Such cases are generally fatal.

The value of a remedy in the treatment of diphtheria is to be estimated by its disinfecting properties, or, in other words, its bactericide action. The best means of combating the disease is the application of medicated vapor by inhalation, selecting those remedies which possess the greatest antiseptic properties with the least injury to the patient. Helfer was the first to use the atomized solution of carbolic acid in proportions of 1:50 and 1:30, and has published his excellent results in the treatment of sixteen cases by this method. Rauchfuss considers this application too strong; but Stumpf, on the contrary, believes that these remedies have been disappointing to many experimenters because they were too weak! The full antiseptic and parasitic action of the carbolic acid is only developed by a five per cent. solution. Stumpf uses a solution of this strength from five to seven minutes by steam atomizer every hour. No disinfecting remedy is so powerful in its operations and at the same time so harmless to the patient as carbolic acid. Its action requires only to be seen to be appreciated, as demonstrated in the prompt cleans-

ing action of the mouth and throat. After a few inhalations of a five per cent. solution the disagreeable odor of the breath disappears, and the loosening of the discolored membrane goes on rapidly without any odor. This treatment of the membrane by carbolic acid is painless, and so much the less painless in proportion with the amount of the deposit. If properly managed the destruction of the healthy mucous membrane by this treatment is not to be apprehended. By the admixture of the steam in this treatment, the five per cent. solution is really reduced to three or even two and a half per cent. by the time it reaches the throat. [During its use attention should be given to examination of the urine to detect any evidence of toxic action].—*Med. Times*.

Hydrochlorate of Cocaine in Purpura Hæmorrhagica.

DR. WILLIAM F. WAUGH (*Med. Times*): A lady aged 27 years had had several profuse hemorrhages within a period of four months. Her color was still good; her health apparently unimpaired; but her blood had become deficient in coagulability, so that a slight prick on the finger occasioned hemorrhage which was only checked with difficulty.

Since the middle of December the lady had several premonitory symptoms. On the 18th of December, after unusual fatigue, she fainted. After this date several uterine hemorrhages occurred of small amount. On the 1st of January she complained of a sense of fulness in the head, as if her nose were about to bleed. That evening she took six grains of quinine. Later the same evening she felt something like a fragment of food between two of her teeth, and endeavored to remove it by drawing the edge of a handkerchief between

them. At once the gums commenced to bleed from where the handkerchief had been used, and, later, from a number of other places. On the lips, tongue, inside of the cheeks, gums, and roof of the mouth appeared a number of purple spots from the size of a pin-head to that of a silver half-dime. A blue spot the size of a half-dollar appeared on the right thigh, and another on the right shoulder. On the face, neck, chest, and limbs, the spots were smaller and bright red. Slight discharges of blood took place from the womb. The stools were tarry. The face was pale, the skin cool, the pulse weak and compressible. She complained of alternating flushes and chills, and of vertigo whenever she attempted to rise from the recumbent posture. The elbows and knees ached as if they had been bruised.

From this time until the evening of the 3d, I was engaged in trying the various styptics to check the blood which oozed from the gums. Alum, tannin, phenol, phytolacca, and Monsel's solution were used with no appreciable effect. The only local remedy which checked the hemorrhage was ice; and of this the effect was but momentary. Internally, phytolacca, ergot, digitalis, and hydrochloric acid were given. After forty hours the hemorrhage was still increasing.

In this predicament I remembered having read in one of the recent reports upon hydrochlorate of cocaine, that after its use there was less hemorrhage than in operations conducted without it.

I procured a little of a four-per-cent. solution of the drug, and applied it twice to the bleeding gums, and to a spot on the under lip where the blood was just beginning to gush out. The next time I saw my patient, in about three hours, I found the hemorrhage had entirely ceased, except at one point.

Here the gum was covered with a clot of blood. I removed this and applied the cocaine solution directly to the bleeding surface, and in five minutes the hemorrhage ceased, and did not return.

On January 5, I removed an eye-tooth, with a very long root, from the mouth of a lady in her eightieth year. She dreaded the operation greatly, as she had had serious hemorrhage from the same cause not long before. When the tooth was extracted the blood began to flow freely; but simply pressing a bit of cotton saturated with cocaine solution into the cavity stopped the hemorrhage at once.

A few days later a lady came to me with a simple inflammatory swelling of the upper lip. I applied the cocaine solution, but in spite of it the inflammation went on to suppuration. This but seldom happens when such cases are treated with continuous applications of hot-water cloths. From these cases I would infer that cocaine has valuable powers in checking capillary hemorrhages of a passive kind, but none whatever in controlling crescent inflammation.

In physiological action, as determined by applying the solution to the web of a frog's foot, is to cause contraction of the blood-vessels, followed by dilatation. This secondary dilatation, however, did not occur in the case of purpura.

I wish to add one more to the uses of this drug as a local anæsthetic. The removal of hairs from the lips and chins of ladies, by electrolysis, is in some cases exceedingly painful. To many the operation is practically painless. Others bear the pain with patience for the sake of getting rid of the ugly deformity. But to anæmic, highly neuralgic persons the pain is sufficient

to deter them from the operation. In several cases of this kind I have found that applications of the four-per-cent. solution to the skin, repeated every ten minutes, renders the process absolutely free from pain.

A Practical Point in the Treatment of Pleural Effusions.

Dr. BROADBENT (*Lancet*), in a clinical lecture, says that when he hears a distinct bronchial breathing generally over the chest in cases of pleural effusions, he feels sure that a consolidated lung is immersed in the fluid, and he consequently does not tap unless the symptoms are so urgent as to demand interference. A solidified lung cannot, of course, expand, as does one which is simply collapsed or even compressed, unless it is bound down by adhesions; and experience has shown him that on the resolution of the pneumonia the fluid is usually rapidly absorbed.

He seems to hold the sound views that with grave symptoms a pleural effusion should be withdrawn, whatever the complication; that the course of moderate effusion may often be shortened by tapping; but that, if the lung be consolidated—one evidence of which is the persistence of bronchial respiration over a whole or a large part of the chest—it is better to wait, if the condition of the patient warrants such a course.—*Boston Medical and Surgical Journal*.

Mental Element in Gout.

Dr. J. MORTIMER GRANVILLE calls attention in the *Lancet* to the clinical fact that an attack of gout is particularly liable to occur in the gouty subject at either of two mental or cerebral crises: on the eve of a great mental effort, when the brain is at its highest tension, or after an intellectual effort,

when the centres are exhausted. In the former case the attack is severe and accompanied by neuralgic pains, in the latter it may take the form of an epileptic fit or syncope, followed by more or less prolonged depression, or it may rapidly develop into a formulated arthritis of the ordinary type. In the former there is present a neurosis which calls for special treatment after the paroxysm is over.

In all forms of gout Dr. Granville has given the following formula with such success that he recommends its trial by others. He never gives colchicum: $\mathcal{R}$. Ammonii chloridi, $\mathfrak{z}$ iv.; potassii chloratis, $\mathfrak{z}$ ii.; glycerini, f $\mathfrak{z}$ xii.; tincturæ iodini, f $\mathfrak{z}$ ii.; aquam ad f $\mathfrak{z}$ xii.—M. Dose.—Two tablespoonfuls four to eight times daily.

To Render Oral Suction after Tracheotomy for Diphtheria Harmless.

In view of the fact that Dr. RABBETH recently died in England from diphtheria contracted by sucking the tracheotomy tube, Dr. John W. Ogle writes to the *Lancet*, offering the following suggestion, which seems to have a ring of good sense about it.

He suggests that such suction would be rendered free from any risk, provided that a piece of some very thin, soft, and pliable material, such as extremely delicate cambric or silk (so-called "grenadine" or "gossamer"), three or four inches square, were laid over the windpipe and so adapted as to form a small pouch or sac over the orifice made therein, which should be received into the mouth of the operator before the suction was practiced. The character of the tissue or material would permit of the movements of the lips and tongue appropriate to the act of sucking; and the diphtheritic stuff would be almost as easily drawn into the sac contained

in the mouth as if nothing had been interposed between the windpipe orifice and the cavity of the operator's mouth. It would doubtless be, also, advantageous if the substance forming the sac or pouch into which the diphtheritic material would be sucked were well moistened by some suitable antiseptic liquid, such as a solution of boracic or salicylic acid, or a spirituous solution of thymol or diluted oil of eucalyptus. By such a procedure as the above described the diphtheritic films and fluids aspired into the mouth would not, in any case, come into direct contact with its lining membrane; and in this way danger to the operator would be entirely obviated.—*Med. and Surg. Reporter*.

Treatment of Diphtheria.

The *Centralblatt für die Gesamte Therapie* mentions three varieties of treatment which have recently been brought forward. A solution of corrosive sublimate (one to ten thousand) is hourly applied to the throat, each time using a new feather (absorbent cotton upon a stick would probably answer the purpose very well), by Dr. RUDOLPH CANSTATT, Uruguay. Dr. Moly reports excellent results from the following: on the first day every fifteen minutes, on the second day every hour, finely pulverized camphor is applied by a brush, or with the fingers; at the end of forty-eight hours even the worst cases show striking improvement. He lost, out of one hundred and forty-three, only two cases, one of which was for too short a time under treatment, the other was refractory. Dr. F. Kuchenmeister recommends a treatment which he has used for twenty years. He dilutes Volquardt's mixture ($\mathcal{R}$ Sodii nitrat., sodii carbonat., aquæ, āā 2 G.) with water 100 and syrup 20. The sodium salts appear to act upon the blood, and especially its

protein albumen, and also in such a manner as to reduce the fever. He also applies a sublimate solution locally several times daily, and uses lime water (diluted three-fourths with water) as a gargle. The union of the lime water with the sublimate is considered a favorable one, because the diphtheritic membrane is first dissolved, and the sublimate solution attacks the germs and destroys their activity.—*Deutsche Amerikan Apotheker Zeitung*.—*Md. Med. Journal*.

Oil of Gaultheria in Rheumatism.

So many remedies have been from time to time highly vaunted in the treatment of rheumatism, to be afterwards relegated to comparative obscurity, that we always look with distrust upon any new recommendation. However, the oil of gaultheria is so highly recommended by Dr. H. H. SEELYE, of Massachusetts, in the *New York Medical Journal*, that we feel called upon to notice his remarks.

About two years ago its use was commenced in Bellevue Hospital, New York, when Dr. Seelye was house physician there, and its results were so satisfactory, that from that time onward it has been the main reliance in all rheumatoid affections.

The medicine, it was found, could be administered in various ways, the most agreeable being in capsules, either alone or mixed with salicylate of sodium, or in soda-water as a flavoring. But the method most employed was to give it in an emulsion of ten minims of the oil to half a drachm each of glycerin and water. If the patient had been sick for some time, and the inflammation of the joints was extensive, they usually ordered two drachms of this mixture every two hours during the day, and every three hours throughout the night.

Under this treatment almost invariably within twelve hours the patient would express great relief, and by the end of twenty-four hours the pain and swelling would have left all the joints except, perhaps, a little in some one articulation; and there would only remain a slight stiffness of the previously-inflamed parts, due, probably, to the distension of the adjacent tissues by reason of the swelling, which had now disappeared. Before or about this time, however, the patient would generally complain of some ringing in the ears and deafness, similar to that produced by large doses of quinine, but usually not so markedly annoying in character, and he would be apt to have some headache or a sensation of fullness in the head. These symptoms occurring synchronously with cessation of pain, tenderness, and swelling from the joints, and with a sudden fall of temperature to the normal, were generally considered an indication for diminishing the dose of the medicine, and it was, therefore, usually reduced to one drachm every three or four hours, according to the relative amount of the cerebral and joint disturbance. If too much of the medicine was still given, its evil effects became more marked. The patient would now experience a loathing of the drug; nausea and vomiting would set in; the deafness, tinnitus aurium, and the headache would increase; the muscles of the hands, limbs, and face would become tremulous; the countenance would be flushed, and the whole body be bathed in a profuse perspiration; and at length the patient would become delirious, till in some instances the symptoms so closely resembled those of delirium tremens, that it was often difficult or quite impossible to tell whether they were really the manifestations of the physiological limits of the remedy, or

those of an alcoholic patient deprived of his accustomed stimulants. These extreme symptoms, more or less modified, were observed in, perhaps, eight or ten cases of acute articular rheumatism, but they almost invariably occurred in patients who had been hard drinkers, and in whom the attack of rheumatism was most probably due to some unusual exposure to cold or wet while in a state of intoxication. In the large majority of cases only a little ringing in the ears was complained of, and this would soon cease upon the diminution or complete withdrawal of the drug. There were also very many cases in which no evil results were ever manifested, but the patient speedily recovered without experiencing any annoyance.

DISEASES OF THE NERVOUS SYSTEM.

The Treatment of Sick-Headache.

Dr. W. GILL WYLIE, of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria, every hour until relief is felt, or until six have been taken. Dr. Wylie states that sick-headache as such is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.—*N. Y. Med. Journal*.

A Specific against Migraine.

Bulletin de therap.—A mixture of bromide of potass with deodorized tinct. of opium is regarded as a specific against the paroxysmal pain in migraine. 1000 cases are known to the writer, who found immediate relief from migrainous pains, who could get off and attend to

business at once. A woman subject to hereditary hemicrania for more than thirty years, was enabled to anticipate her sufferings by 90 grs. of bromide of potass with 40 drops of deodorized tincture of opium.—*St. Louis Med. and Surg. Journal*.

The Treatment of Gastrodynia.

The following instructive case of this obstinate and troublesome affection is reported in the *Medical Press*, by Dr. JOHN W. MARTIN:

Miss R., æt. thirty, came under my care October 3, 1884, suffering from pain in the stomach after meals, and the consequent dread of and loss of desire for food. When seen she looked quite worn and thin; complexion sallow; lips and gums anæmic; tongue whitish and lightly furred; bowels constipated. She felt a daily increasing sense of weakness and inability to attend to her duties. Physical examination yielded negative results as regards the condition of the various organs. The case seemed one of dyspepsia consequent upon anæmia. The uterine functions were, with the exception of paleness of the menstrual discharge, normal.

I at first ordered bisinuth, soda, and tr. nux vom. mixture with chloroform water; and calomel, colocynth, hyoscyamus pills to regulate the bowels. This giving no relief, I changed to pills of reduced iron and extract of nux vomica with meals, and as a laxative a mixture of sulph. mag. and mag. carb., with peppermint water. Again, no relief being experienced, I placed her upon the following prescription: $\mathcal{R}$. Sodæ bicarb., $\mathfrak{z}$ iss.; tr. nucis vom., $\mathfrak{M}$ xl.; liq. morph., $\mathfrak{z}$ j.; sp. am. aromat., $\mathfrak{z}$ iss.; syrupi zingib., $\mathfrak{z}$ j.; aquæ menth. pip. ad., $\mathfrak{z}$ viij. M. $\mathfrak{z}$ j. to be taken four times a day.

The relief was immediate, and so far has proved permanent. Pain is now rarely felt, and only after indiscretions as to food. Relish for her meals has returned. She is now taking the reduced iron and extract of nux vomica pills with meals, and finds decided benefit from them. The bowels are regular, the tongue clean, and her complexion and general appearance much improved.

I am inclined to think the small dose of opiate was just the one thing wanting in my previous treatment, to help the lame dog over the stile.—*Med. and Surg. Reporter.*

Paralysis.

A remarkable series of coincidences occurred lately in Prof. DaCOSTA's clinic. Five patients presented themselves for the first time, suffering from paralysis of certain groups of muscles, due to over-taxation. One was a telegraph operator, another a blacksmith, the third a shoemaker, the fourth a bookkeeper, the other—a woman—a shoe-beader. The first four were treated with strychnine hypodermatically; the last, since the above plan would be injurious, was given: $\mathcal{R}$. Strychninæ sulph., gr. j.; acidi phosphoric dilut., elixir simplicis, āā , $\text{f} \frac{3}{4}$ j.; aquæ, ad., $\text{f} \frac{3}{4}$ iv. M. Sig.—3 j. ter in die.—*Coll. and Clin. Record.*

Epilepsy.

Children of drunkards are apt to suffer especially from nervous diseases. Dr. R. BERAND (*L'Encephale*, 1884, 3) has recently seen several cases where the father having been a drinker, epilepsy developed in his children. He reports one case of a woman whose father had all his lifetime been a hard drinker. From her earliest youth she had suffered from epilepsy. The num-

ber and the intensity of the seizures later increased during each menstruation, but they became most severe during pregnancy. While the patient was in such a condition, she was treated by B. with preparations of bromide, oxide of zinc, and extract of belladonna. Of the first (bromide of ammonium and of sodium) āā eighty grains per diem were administered, and she besides took pills made of the oxide of zinc and the extract of belladonna. Under this treatment the attacks gradually diminished in severity and in number, and finally ceased altogether; and it may be specially remarked that it had no unfavorable influence whatever upon the course of the pregnancy, a healthy child being born at full time.

There are many diseases, especially those of an infectious, chronic character, as phthisis and cancer, whose progress is generally arrested during pregnancy, and which recommence with increased vigor as soon as parturition is over. Nervous diseases, however are apt to evince no amelioration during the period of gravidity of the uterus, but on the contrary, they usually appear with greater severity. Of no nervous diseases this statement can be made with greater certainty than with epilepsy, and the cure effected in B.'s case is, therefore, the more remarkable. The case besides establishes the often denied fact that an active treatment with the remedies mentioned finds no counter-indication in the presence of pregnancy, neither the mother nor the child apparently suffering from it more than would at any other time be the case.—*Med. and Surg. Reporter.*

Apomorphine in Nervous Affections.

Dr. WEILL (*Lyon Med.*) has used this drug in several cases, and summarizes his result as follows: 1. The hydro-

chlorate, given hypodermically, in doses of from one-thirtieth to one-tenth of a grain, has a favorable action in various spasmodic affections, such as obstinate hiccough. 2. It also acts well in cases of a convulsive character, such as epilepsy and chorea. 3. By using the drug carefully, the sedative effects may be produced without the nauseating action.—*N. Y. Med. Jour.*

DISEASES OF THE URINARY ORGANS.

Treatment of Nephritis.

PROF. CANTANI (*Centralb. f. d. gesammte Therapie, Lond. Med. Rec.*), in acute forms, recommends expectant treatment, rest in bed with warm coverings, abstinence from fluids, and inunction with oil, followed by packing in blankets. Warm baths may be used to facilitate diaphoresis. Diuretics and purgatives are contraindicated, as they increase the loss of albumen and favor hydræmia. The diet must be bland and milk diet is best. Eggs do not increase the albuminuria. Less acute cases will be benefitted by the employment of tannate of quinine and gallic acid, with alkalies if the urine be scanty, on account of stoppage of the canaliculi. In chronic cases parenchymatous nephritis must be distinguished from interstitial. In the parenchymatous forms attention must be paid to the condition of the skin, and diaphoresis induced when necessary. Meat or fish may be given to repair the waste of albumen, but stimulants are to be carefully avoided, unless absolutely necessary. Gallic acid is to be preferred to tannic for internal administration, and diaphoretics must be used rather than diuretics. Drastic purgatives must be resorted to only when a prompt and

temporary action on the intestines is desired, as in threatening uræmia. Interstitial nephritis tending to atrophy requires no diaphoretics or diuretics; oil may be used for the dryness of the skin. Iodide of potassium, recommended by Bartels has no influence in retarding the hypertrophy of the connective tissue. It may be useful like other alkalies, in counteracting the cardiac hypertrophy. Digitalis is beneficial for the frequent and incomplete cardiac contractions.—*Md. Med. Journal.*

Incontinence of Urine.

Prof. BARTHOLOW points to four factors in incontinence of urine; acidity of the urine, and relaxation of the vesical sphincter being the most prominent; spasmodic contractility of the muscular coat during sleep as the third factor, and the fourth, which is comparatively rare, is dreaming of a desire to urinate, when the bladder is full (the brain being here at fault). For acidity of the urine, the persistent administration of bicarbonate of potash, or some other alkaline salt of potash, in an effervescent draught, is advised. The incompetency of the sphincter is to be treated by half-grain doses of aqueous extract of ergot, and a quarter of a grain of extract of nux vomica. Bromides should be given at night to diminish the contractility of the muscular coat of the bladder. Many of these patients are anæmic, and the administration of iodide of iron is indicated.

The incontinence of urine in boys is frequently due to phymosis, or to the presence of a calculus in the bladder; and, in young girls, to vulvitis, or urethritis, caused by the irritation of thread worms in the vagina, which have reached there from the rectum. And late suppers, profound sleep, and other causes

which produce seminal emissions in the adult male, produce urinary discharges in the male child.—*Med. World.*

Knee-jerk in Diabetes.

The *Lancet* writes : The introduction of one new condition into any existing arrangement cannot take place without producing more than one alteration. The phenomenon of the knee-jerk which may practically be said to have been introduced into the sphere of clinical medicine during the past decade bears testimony to the above generalisation. The investigation of the condition of the knee-jerk may seem to some medical men a somewhat novel application of a reflex action. M. BOUCHARD made a distinct impression by his paper on the subject at the French Association for the Advancement of Science, recently held at Blois. The presence or absence of the knee phenomenon in diabetes mellitus, is said to possess much importance both from a prognostic and diagnostic point of view. Forty-seven cases observed during the last three years by M. Bouchard, were found to have patellar tendon reflex, and of these cases only two died, or about four per cent. Nineteen cases were collected in which the knee-jerk was absent, and of these six were fatal, or about 33 per cent. ; the mortality in the latter group may have been still greater, since some of the number were lost sight of. M. Bouchard believes that the disappearance of the knee phenomenon in the course of diabetes, indicates the entry into a grave and perilous state. It is perhaps lending too much value to the knee-jerk to say that the absence of it has given the cue to the diagnosis of diabetic coma ; a statement to this effect may be found in the report from which we abstract our information on M. Bouchard's paper. An infant was found comatose

with dry cracked lips and absolutely afreble ; none of its antecedents could be ascertained. The knee-jerk was absent and the coma resembled that met with in cases of intoxication, and of uremic or diabetic toxemia. There was the odor of acetone in the breath ; some balanoposthitis and intense thirst. A washing from the child's underlinen reduced Fehling's solution. M. Bouchard thinks it necessary to state that the absence of the "tendon reflex" does not favor the nervous theory of diabetes.

DIGESTIVE TRACT.

Treatment of Cholera.

From Dr. WYMAN'S Paris letter in *St. Louis Courier of Medicine* :

* * * * I may here remark that quite a discussion has taken place in the French Academy of Medicine concerning the nature of the epidemic, one party asserting a premonitory stage (premonitory diarrhœa) and the other denying it. Guerin is the chief supporter of the first named belief.

In the premonitory stage Dr. Guerin enjoins abstinence from solid food.

For the vomiting and purging he gives charcoal and laudanum.

When the vomiting and purging have ceased, he gives one dose of the sulphate of magnesia to eliminate the materies morbi—one dose only, but a good-sized one.

In collapse, he treats only the symptoms.

No opium or specific remedies.

If the body is cold he makes warm applications, but does not use friction.

When convalescing he gives sustaining treatment—iron and alcohol.

He does not believe in the cholera microbe.

He claims to have saved 70 per cent. of his patients.

He asserts that cholera still exists in Paris to-day.

Dr. Brouardel, President of the French Commission, sent to Marseilles and Toulon during the epidemic, states that during the last epidemic no advance was made in the treatment of cholera, unless we except the experiences of Prof. Hayem with intravenous injections.

He says that all the doctors agree upon the same general plan of treatment, viz., treatment of the general symptoms.

To relieve the cramps he recommends hypodermic injections of morphia, yet enjoins circumspection, because in some cases, if too large a dose is given, when reaction comes on, the morphia seems to retard favorable progress.

Professor Peter's treatment.—Stage 1. Infusion of rice with ten drops of laudanum. No nourishment.

In algid stage.—Warmth, by means of warm blankets, bricks or hot irons; avoid opium. He does not use friction.

In period of convalescence quinquina, iron, good food, toddy.

For disinfecting the room he uses carbolic acid and borate of soda.

From another interne I learned Professor Cornil's usual treatment at the Hôpital Pitié.

In the algid stage a cordial potion with twenty drops of laudanum. Frictions with turpentine oil, poultices sprinkled with same. For the cramp, morphia hypodermically.

At this hospital hypodermic injections of caffeine were tried in the stage of collapse, but the results were bad, causing gangrene of the skin. Hayem's method and solution (chloride of sodium and sulphate of soda in water) were also employed in ten or twelve cases.

Prof. Haymen's treatment in the first stage is salicylate of bismuth in doses of four or five grammes. He also uses morphia hypodermically and frictions with chloroform liniment. When the heart's action is feeble he gives stimulants, and applies warmth to the body if cold.

In collapse he gives hypodermic injections of ether—two, three or four grammes in twenty-four hours. In collapse he also resorts to the intra-venous injection of the following formula: Water, 1000 grammes—one litre or pint; chloride of sodium, 5 grammes=75 grains; sulphate of soda, 25 grammes=375 grains.

The above he uses at one injection. Formerly he employed one gramme of carbonate of soda in the solution, but has discontinued it. He has used these injections in ninety cases. When asked the percentage of recoveries he stated that the tables had not been made out. They will appear in his article. He said, however, that he had had no unfortunate result following their use. He showed us the apparatus which he had devised for giving their injections. I will not attempt a description of the instrument further than to say that it is simple in construction, and consists of a long piece of rubber tubing with a bulb at the centre. One end of the tube rests in the vessel containing the solution, the other is attached to the cannula which is inserted into the vein. At each end of the bulb is a valve and the construction is such that each pressure upon the bulb injects twenty grammes of the solution.

He generally chooses one of the basilic veins and operates with a pair of spring forceps and scissors. First making a transverse incision through the skin and afterwards through the cellular tissue, he grasps the vein with the forceps,

and with the scissors cuts transversely. He then introduces a silver cannula about two inches long in which is a close fitting probe, which prevents the admission of air. The end of the rubber tube above mentioned is provided with a smaller cannula made to fit nicely into the one that has been inserted into the vein as soon as the probe has been withdrawn.

The injection of one litre (or pint) of the solution generally takes five or six minutes. Sometimes more than this quantity is injected at a sitting. The solution injected is kept warm, about the normal temperature of the body, by immersion of the vessel holding it in another containing hot water, and to prevent its cooling in transit the bulb itself is worked under water of the proper temperature. This also prevents all possibility of air entering through the valves. When from any cause it is difficult to open a vein, he throws the solution into the peritoneal cavity.

In all the modes of treatment above detailed there will be noticed a striking absence of acids or other remedies based on the existence of the comma bacillus. The comma bacillus has very few believers in Paris and I believe that French prejudice has something to do with it, just as British commerce influences English opinion. The fact is American physicians are better able to-day to take an intelligent view of the cholera question than those of any other country. They may profit by German investigation without their sight becoming entirely microscopic, and by the experiences of last summer without French prejudice or a British commercial bias.

Obstinate Constipation.

The *Col. and Clin. Record* states a woman presented herself at the clinic

complaining of constipation consequent upon atony of the lower bowel. Often she had been six weeks without a passage, and at no time during the last year had she an evacuation under two weeks. Prof. DA COSTA placed her upon the following treatment: $\mathcal{R}$ Magnes. sulph., $\mathfrak{z}$ j.; acid. sulph. dil., $\mathfrak{f}$ 3 ij.; ferri sulph., 3 j.; aquæ, Oij. M. SIG.—A wine glassful ter die.

She was also given strychninæ sulph., gr. 1-40 at meal times.

Monse's Iron in Diarrhœa.

Dr. EDWARD T. WILLIAMS says in the *Boston Med. and Surg. Jour.* :

"Ever since I began practice in 1868, I have been looking for a really satisfactory astringent in chronic catarrh of the bowels. There is, as every one knows, a class of cases where the ordinary vegetable astringents fail to act, or at least act too feebly to do real good. The intestinal lining is in an ulcerous, or quasi-ulcerous condition, and requires the potent action of a mineral astringent to treat it, as in cases of external ulcer. The acetate of lead is one of the best remedies in these cases, but cannot be safely given for any great length of time. Oxide of zinc in pill form is safe and efficient, but with children, who must take it in powder, often vomits and gripes. Sulphate of copper and nitrate of silver are still harsher, and for children quite out of the question. Subnitrate of bismuth is worse.

"I began trying in 1876, at the Seashore Home, iron alum (the officinal sulphate of iron and ammonia). I found it better than anything I had previously tried, and have used it freely ever since. It is not quite so well borne by the stomach as lead and bismuth, but far better than zinc or copper. The dose for a child is from one to three grains; for adults, from three to ten. At the

Seashore Home we make powders containing one grain of the salt to a twelfth of a grain of opium, giving one or more for a dose according to the age of the child. For adults the pill form is of course preferable. I have had the best results from its use.

"Last summer I began using Monsel's salt in its place, both in public and private practice. This I did from my experience of its great efficiency as a styptic, and a presumption that it might do equally well in diarrhœa, and have found it even better than iron alum. I have tried it only in the dry form, manufactured by Squibb under the name of pulvis ferri subsulphatis. In this state it is not officinal, though it is precisely the same as the officinal liquid ferri subsulphatis evaporated to dryness. It may be given in the same doses and in the same way as iron alum."

Nitrate of Silver for Fissure of the Anus.

At a recent meeting of the New York Clinical Society (*New York Med. Journal*), Dr. KELSEY stated that for the past two years he had not been obliged to stretch the sphincter for fissure of the anus in a single case. He had used instead a weak solution of nitrate of silver, five to ten grains to ounce. In one patient recently under his care a single application of a ten-grain solution effected a cure; another very obstinate case was relieved in three weeks.—*Louisville Med. News.*

DISEASES OF RESPIRATORY ORGANS.

Phellandria.

In England this ancient remedy has received fresh attention, and is said to be a most valuable agent in treating

various affections of the chest characterized by excessive cough, whether dry or attended with expectoration. Its action appears to be of a sedative as well as of an alterative and strengthening kind. Narcotism is not produced by its administration. It appears to have a special action against pulmonary phthisis. The most acceptable preparation is the syrup of phellandria used in a concentrated form. Other preparations, such as the arseniate of iron may be advantageously prescribed with the syrup.—*Ibid.*

Treatment of Coryza by Inhalation of Camphorated Vapor.

The *Revue Médicale d'Hydrologie et de Climatologie Pyrenéennes* quotes from the *Lancet* the following treatment for coryza, to which it attributes great efficacy:

"Put in a coffee-pot, half full of boiling water, four grammes of camphor coarsely powdered or grated. Let the patient make a horn of paper of a size sufficient to envelope the face with the larger opening, while the smaller embraces the spout of the pot. Fitting the paper closely to his face, he breathes freely and thus inhales at each inspiration the camphorated vapor, forcing it at each expiration against the exterior surface of the nose and the neighboring parts. A double action is thus produced; the camphorated vapor acts internally, in a specific manner, on the whole extent of the mucous membrane, and exteriorly it produces a profuse perspiration of the nose and cheeks, thus causing a diversion of inflammation from the membrane of Schneider.

"The coffee-pot should be covered with a woollen cloth to retard the cooling of the water, or, better still, an alcohol lamp or hot iron should be placed under it to keep up the temperature of

the water and the vaporization of the camphor. The patient should continue to respire, keeping the horn pressed to the face for ten or twenty minutes, and repeating the process every hour till he experiences complete relief. From the first inhalation he will feel better, and three or four repetitions of the experiment will generally suffice to bring about a cure.

"Camphor, in some of its preparations, has been, as we know, much employed in the treatment of catarrh, but the simultaneous application of the vapor exteriorly and internally has not been recommended in any work of medicine. This method of using it is nevertheless very effective, and, as it is easily employed, we believe that those who try it will find a remedy as simple as efficacious in the treatment of coryza."—*Atlanta Journal of Medicine*.

Asthmatic Attacks.

Retrospect British Medical Journal.—The influence of nasal polypi in causing asthmatic attacks is a practical point of some importance which has been illustrated by Marini.—*Weekly Med. Review*.

Asthma.

Dr. FAULKNER (Pittsburgh) treats the paroxysms of asthma successfully by the application of tincture of iodine along the course of each pneumogastric nerve in the neck.—*Col. and Clin. Record*.

Tuberculosis.

Prof. POTAIN employs the following: Chloride of sodium, 10 grammes; bromide of sodium, 5 grammes; iodide of potassium, 1 gramme; distilled water, 100 grammes. M. Sig.—A tablespoonful (15 Gr.) every morning in a glass of milk.—*Ibid*.

Sweating of Phthisis.

For the sweating of phthisis, Prof. BARTHOLOW advises: $\mathcal{R}$. Acid, gallici, 3 ss.; ext. belladonnæ, gr. ij. M. Ft. pil. x. Sig.—Two pills at bedtime.—*Ibid*.

Beech-Creasote in Pulmonary Affections.

In the same journal Dr. LASINGE recommends a combination of creasote, balsam of tolu, and Norway tar in the treatment of pulmonary affections. He gives the following formula: Pure beech creasote, 1 minim; purified Norway tar, balsam of tolu, each 1.5 minim.

Inclose in a capsule. In incipient phthisis, two such capsules should be given morning and evening. In advanced cases the number of capsules may be increased to twelve daily.—*N. Y. Med. Journal*.

Eucalyptol in the Treatment of Catarrh.

Dr. EDWIN ROSENTHAL (*New York Medical Times*) has experimented during the last winter and spring with eucalyptol in acute and chronic catarrhal affections of the air passages with peculiarly gratifying results. He has found its action to be antiseptic, deodorant and alterative. He directs that eucalyptol be placed in a wide-mouthed bottle—say one drachm to an eight-ounce vial—and boiling water be added, and the fumes therefrom be then inhaled; or that a small quantity be placed in the vial so that its contents may be spread over the sides of the vessel, thus making a larger surface for evaporation.

Cough.

For later stage of cough when fever has subsided, and no glazed condition or redness of tongue: $\mathcal{R}$. Fl. ext. wahoo, 3 vj.; spts. nitree, 3 j.; fl. ext. senega, 3 j.; sulph. morphine, grs. iij.; syr. tolu to make 3 vj. M.

CONSTITUTIONAL DISEASES.

Rheumatic Laryngitis and Pharyngitis.

Dr. A. H. P. LEUF, of Brooklyn, contributes the following interesting case :

Mr. S., framer by occupation, German, about 50 years of age, married, and of massive build, was taken with a severe attack of acute inflammatory rheumatism, the result of exposure. The hip, knee and ankle joints of both lower limbs and the corresponding joints of the upper extremity were simultaneously affected, being red, swollen, very painful and tender. His temperature was high, bowels constipated, tongue dry and coated, and appetite nil. On account of his plethoric condition and total lack of appetite he was permitted to abstain from all food for nearly two days, had administered calomel and saline purges, drank large quantities of water, and took gr. x of the salicylate of sodium and gr. v of the carbonate of ammonium every hour for ten or twelve hours, when in consequence of a recession of symptoms, the interval between doses was diminished. At the beginning of the treatment he also received gr. ss. of morphine hypodermically to relieve excessive pain.

By the end of the third day, while taking his medicine at intervals of four hours, his voice became hoarse, he complained of a pain in his throat and developed a marked bronchitis. Inspection revealed a decided injection of the blood vessels of the fauces, pharynx and upper larynx. Gargles having astringent, anodyne and emollient properties were freely used by the patient without benefit ; even strong astringent applications with the brush were productive of only the most transitory effects. I also prescribed for his cough a mixture with which I always obtain

the most satisfactory results, but it proved of little avail.

Having occasion to carefully examine this man's chest with the stethoscope on the afternoon of the sixth day, I was surprised and alarmed to discover a very distinct mitral stenotic and regurgitant murmur. The persistence of the inflammatory condition of the respiratory tract was explained to me at once. It was evident that the mitral affection caused sufficient impediment to the onward flow of blood from the lungs to surcharge these organs with it, and that the damming back in the vessels had extended into the upper air passages. He now suffered only with his respiratory and cardiac complications, otherwise he was comfortable. I immediately stopped everything except the salicylate of sodium and carbonate of ammonium, which I caused him to take again as at the beginning, *i. e.*, ten and five grains respectively every hour. I saw him about six hours later and found him better in every way, and by the next morning the throat symptoms had already almost entirely disappeared. He was kept on the salicylate and carbonate in tapering doses for a week longer, when his heart no longer gave evidence of being in an abnormal condition and all his other symptoms had disappeared. Comment is unnecessary.

Pulmonary Rheumatism.

In a recently published thesis, M. LEBRETON presents the results of his studies on the pulmonary manifestations of rheumatism. These may occur, he states, independently of any articular affection, in subjects who have previously suffered from rheumatism, or who come from a rheumatic family. Pulmonary rheumatism occurs under two distinct forms, the pneumonic and the œdematous. The former is not neces-

sarily associated with a cardiac implication, but may occur when the heart is unaffected. The facies in this form is peculiar, and does not at all correspond to that of ordinary acute pneumonia. The face is pale, and it, as well as the entire body, are bathed in profuse acid perspirations. The stethoscopic signs are fugitive, and may be located at the right apex to-day and to-morrow may be at the left base, or may have disappeared entirely. In the œdematous form the symptoms vary greatly in intensity. There is first difficult respiration, the face is pale, the body is covered with perspiration, the chest is filled with râles, indicating a general bronchitis. The heart is normal. Sometimes the symptoms come on so suddenly and with such intensity that the patient may be carried off in a few minutes. In addition to these two distinct types there are frequently pulmonary manifestations of rheumatism under the form of congestion. Of these three clinical varieties are to be noted :

1. Hæmoptysis. In rheumatic subjects there may be frequent and profuse hemorrhages from the lungs without any tubercular trouble.
2. The remittent form. Here we meet with remittent or intermittent attacks of dyspnœa, more severe at night, and due solely to rheumatic congestion of the lungs.
3. The latent form. This is characterized by the single symptom of a peculiar sound, resembling the crepitant râle of pneumonia, heard in inspiration and most frequently in the right axillary line at the junction of the upper and middle third. The treatment of pulmonary rheumatism consists in the administration of salicylate of soda or of iodide of potash for the persistent manifestations, and of sulphate of quinine for the hemorrhagic and remittent forms.

—*Revue Médicale*.

Salicylate of Soda in Rheumatism.

Prof. CLARKE treated eleven cases of acute rheumatism—all that occurred in his ward at Bellevue—with this drug. In nine of the cases there was early improvement following the use of the medicine. In two cases the amelioration was more gradual. The influence of the medicine in "lowering the fever heat and diminishing the excited pulse were as marked as its power to relieve pain."

The formula used in all cases is as follows: $\mathcal{R}$. Acid salicylic, 3 iij, Soda bi-carbonate, 3 ij, Glycerine, $\frac{3}{4}$ ss Aqua, ad., $\frac{3}{4}$ viij. $\mathcal{M}$. Sig.—Tablespoonful every two hours the first day, and afterward the same dose six times a day. No unpleasant effect of any kind was noticed after the administration of the medicine.—*Med. Record*.

Diagnostic Value of the Soft Palate, as Compared with the Tongue, in certain Pathological Conditions.

Dr. WM. ABRAM LOVE, M. D. (*Atlanta Med. Journal*): The great vascularity (capillary) of both the mucous and the periosteal membrane, together with the great transparency of the same, and the bony and muscular base, gives us an opportunity of noting conditions that are of vast importance, both pathologically and therapeutically. Among these may be enumerated :

1. The color of the liquor sanguinis.
2. The arteriolic tension, or atony, in resistance or non-resistance to the passage of blood corpuscles; or, in other words, by the inspection of these spaces we are enabled to approximate an estimate of the amount of coloring matter (biliverdine) tinging the non-corpuscular blood tissue, in the first place, and secondly, we are enabled to approximate pretty correctly the "work-

ing" of the vaso-motor nerve system, particularly along the line of the alimentary canal. (This does not apply, we would parenthesize, in cases of local irritation in these palatine tissues, except so far as relates to these local membranes.)

I have found that in that condition of the system to which the term "bilious" has been applied, this muco-periosteal membrane invariably presents the yellow hue of lighter or deeper shade, indicative of the existence of billiverdine in the liquor sanguinis. This yellow tinge or color will vary in different cases, or at different times in the same case, from the lightest canary to the deepest orange or saffron, and the depth of shade will indicate the amount of "biliousness," or the extent to which biliary coloring matter is retained in the blood tissue. As this tinge deepens, the skin becomes more and more sallow, approaching towards that appearance exhibited in mild cases of acute jaundice. In all cases, under any and all circumstances, where bile has been "re-absorbed," or where it has not been eliminated from the blood, in malarial toxemia, in duodenitis, in biliary cysts, and in every condition of the system where, by its existence in the liquor sanguinis, or where, as a result of such pathological condition, the tissues become tinged, the color will present itself first and deepest in the muco-periosteal membrane in the mouth as designated above. The only condition obstructing its appearance will be where there exists engorgement or irritation, inflammation, distending the minute capillaries to such an extent as to admit of the blood corpuscles, when the redness of the tissue swallows up the fainter yellow hues. By examining this portion of the roof of the mouth we gain a better knowledge of the con-

dition of the portal system and hepatic action than the tongue indicates as to the condition of the stomach, in the circulation in its mucous membrane or the action of the gastric glands.

In all that class of diseases in which the general condition of the system demands the use of remedies known as cholagogues, of whatever kind, and in all forms and complications, experience has taught me that I risk nothing in saying that the muco-periosteal membrane in the roof of the mouth will by its yellow tinge invariably indicate the necessity for their administration; *per contra*, I may say, with equal confidence, that the absence of this yellowness indicates, with equal certainty, that such remedies have been sufficiently used or are not needed. For thirty years this has been my guide, and I do not feel to-day that I have ever been misled by it. Other members of the profession, whose attention I have called to the fact long years since, tell me that as a guide in their daily professional work, it has served the same good office. Attention to it will do away with much of the use of, or rather abuse of, calomel.

In other pathological conditions than this, the appearance of the palatine surface will serve us a good purpose as a guide. Thus, for example: in all that class of diseases known as exanthema majora, the eruption makes its appearance in the roof of the mouth, from twelve to twenty-four hours, and in many instances longer, before it appears on the cutaneous surface. In small-pox, in scarlet fever, in measles—in all their grades—the eruption may be looked for with confidence in this region long before it can be detected at any other point, and, as the eruption is often the last link in the chain of evidence necessary to decide a question of diagnosis, the knowledge of this fact

will always equal the importance of the question at issue; it has, in some instances, served me a valuable purpose.

In intestinal irritation and inflammation, in the approach, progress and decline of enteritis and dysentery, the soft palate is a better indicator as to the condition of the intestinal mucous membrane than the tongue.

In the rise and progress of such cases there is vascular engorgement of the palatine mucous membrane, indicating a like or worse condition along the line of the intestinal canal—a little attention to which will familiarize the practitioner with the varied changes in the appearance of the one, as pointing to the pathological conditions existing in the other.

In cases where this yellow tinge of the soft palate presents itself, another and more general disturbance will be found in the systematic capillary circulation. If, under pressure, the blood corpuscles are forced out of the cutaneous capillaries on the back of the hand or the wrist, the subcutaneous tissue will present, as seen through the skin, more or less of a yellow tinge, such as is seen in the soft palate, or in case of jaundice, varying in different cases as to depth of shade. Not only this, but the blood will be found to return tardily to the capillaries, showing a passive capillary circulation not consistent with healthful action—a torpidity interrupting both assimilation and elimination. This condition results ultimately in a pathological accumulation of the effete products of physiological combustion in the organism. These in turn produce depressions. Beginning in the peripheral nerve filaments and ultimately affecting the nerve centres—the entire system becomes involved. The relation existing between the peripheral nerves and the capillary system

and their reciprocal action, the one or the other, has not as yet been satisfactorily explained. Still it is evident that the non-elimination of the effete products of combustion in the organism result in depressions—depression in the ganglionic system interfering with trophic action—with assimilation and disintegration—depression in the sensory system, giving rise to neuralgias and other disturbances of sensation—depression in the motor system impairing action and tonicity of the skeletal muscles—depression in the cardio-motor and vaso-motor system interfering with blood speed and blood pressure—all these disturbing healthful functional action. In these the effect adds continuously to the cause, the case becomes more and more complicated, until the tissues give way and organic disease is established where mere functional derangement had formerly existed.

These may seem trivial points in the investigation, but by giving them attention in time, by recognizing these facts and resorting to such remedies as will remove these dead elements—the smoke and ashes of physiological, perchance pathological, combustion that act like Dead Sea waters, supporting no living thing—serious consequences may be averted and healthful action restored.

The Abortive Treatment of Diphtheria.

In a brief communication to the *Berliner Klin. Wochenschrift* for Jan. 25, Dr. COESTES, of Biebrich, adds his testimony as regards the efficacy of the abortive treatment of diphtheria by calomel. He has recently treated five cases, including his own, by the administration of 15 grains of calomel, generally in three doses, closely repeated. Only one terminated fatally, and in that, the trachea was so much obstructed when

he was called, that tracheotomy seemed inevitable. Succeeding the administration of calomel, however, with frictions of mercurial ointment and inhalations, the dyspnœa grew much less. Ultimately, however, the operation was performed, and the child died on the seventeenth day. The remaining cases all recovered, and Dr. Coestes justly says that no one can take it amiss, if he, in consequence, has had his faith in the abortive treatment strengthened.—*Med. News.*

Diphtheria.

Dr. E. H. DENNISON (*New England Medical Monthly*): I have found the following combination the most serviceable of anything I have given: ℞. quiniæ sulph., grs. xv, liq. ammoniæ acetatis, ʒ iss, acetic acid dil. ʒ j, aquæ dist., syripi simpl., aa ʒ iv, * tinct. of chloride of iron, ʒ iij. Mix. Sig. Tablespoonful every three or four hours.

Remarks on Diphtheritic Croup, and the Question "Is the Operation of Tracheotomy in Diphtheritic Croup Dangerous?"

Dr. ADOLPH RUPP, concludes an interesting article in the *Medical Record* as follows:

1. "Tracheotomy of itself, performed with care, involves little if any danger to life" in many cases, but has turned out, in the best of hands, to be immediately dangerous to the patient's life.

2. Accidents during operation, even when care is exercised, may occur, and to say that these accidents are generally due to want of care is to not only overstate circumstances, but to misstate them.

3. It prevents asphyxia when threatened asphyxia is due to laryngeal stenosis, and if the diphtheritic exudative

process halts, and does not implicate the bronchi, etc.

4. It prevents laborious and rapid breathing and lessens exhaustion to the extent that these symptoms had been caused by the laryngeal stenosis, now relieved by the tracheotomy, but no more than this.

5. It is the supreme resource for relieving the suffocation due to laryngeal stenosis, but in other respects does not influence the disease. It is not wise to give the operation too much credit, for if we do so, it may suck us into quarters for which we have no liking.

6. When the operation has been found to relieve the laryngeal stenosis it has answered all it is capable of doing. Of course, persistence of the original disease, *too* long delay in its performance and neglect after, may render the operation futile, but are not to be looked upon as the causes of the failure of the operation.

7. The operation should be done in time, *if possible*, that is, when the laryngeal stenosis has become *abiding* and *progressing* and interferes with the due function of respiration. It should not be done unnecessarily early, nor too late, but it may never be too late to operate, for cases in an insensible and asphyxiated state have been brought back to life by the operation.

8. Operate knowingly and with care, and not unnecessarily hurriedly, so that when unavoidable dangers do present they may be properly overcome, and no blame be cast upon you, or your conscientiousness and ability questioned.

9. Statistics prove nothing unless the character of the epidemic is taken into account, and many other peculiarities. Statistics taken collectively show that about one patient in four or five of those complicated by laryngeal stenosis in the course of diphtheria is probably

saved from death. All death is "certain" and needs no qualifying epithet.

10. Patients dying after the operation would in all probability have died anyhow, and the best consolation in such an event is that, though life was not saved, suffering to some extent at least was mitigated, and the best known possible good had not been neglected in endeavoring to save the patient's life.

Kefir.

ZUBER has published a long article upon this subject, in a recent number of the *Gazette hebdomadaire de medecine et de chirurgie*. He defines kefir as kumyss made from cows' milk, but says this is not an exact definition although it indicates the origin of the preparation. He goes on to say that kefir is "the product of a peculiar fermentation of milk," and is essentially an alcoholic fluid heavily charged with carbonic-acid gas. The ferment, when isolated, is described as a yellowish substance, which tends to form small granular masses. When this is added to milk, fermentation rapidly occurs, carbonic acid gas being evolved, while the casein is coagulated. Commercial kefir is prepared by adding to a bottle of milk a teaspoonful of the ferment, and the milk is kept at a temperature of 15° R. for twenty-four hours, being agitated at frequent intervals. At the end of this time it is filtered, transferred to a fresh bottle, which is carefully corked, and again shaken, for twenty-four hours. This process is repeated once more, and at the end of the third day the strong kefir is formed. A strong preparation should foam violently when the cork is removed, should have a creamy consistence and a pleasant acid smell and taste, and should be free from lumps of casein.

The following analyses are given by

Tuschnisky, showing the change in cows' milk after it has passed through the fermentation process :

	Cows' Milk.	Kefir.
Albumins.....	48'00	38'00
Fats.....	38'00	20'00
Lactose.....		9'025
Alcohol.....		8'00
Water and salts.....	873.00	904'975
	1000'00	1000'000

The density of milk is 1'028, that of kefir 1'026. Beginning with two or three glasses daily, the patient should increase the amount until eight glasses are drank each day. The writer states that the indications for the use of kefir are the same as for that of kumyss, viz., impaired nutrition, especially such as results from acute affections or digestive troubles. He cautiously adds that, although the most extravagant praise has been bestowed upon this new remedy, more careful observations are necessary "in order to define its precise therapeutic value."—*N. Y. Med. Journal*.

Caffeine as a Stimulant.

The same journal gives an abstract of an article by M. HUCHARD, in which the following formula appears : Caffeine—Benzoate of sodium, each 75 grs. : distilled water, 9 oz.

Dose, two to five teaspoonfuls daily. Where the remedy is rejected by the stomach, the following mixture is recommended for hypodermic use : Salicylate of sodium, 45 grs. ; Caffeine, 1 dr. ; distilled water, 45 minims.

The dose is from six to twelve minims. It is especially recommended in adynamic fevers. M. Huchard states that injections of caffeine are less painful than those of ether, that the former drug exerts a direct influence over the cardiac contractions, and that it possesses the double advantage of being at

once a diuretic and a stimulant. He has employed it in the algid stage of cholera, but his observations have not been sufficiently extended to allow him to speak confidently of its value.

Some Working Formulæ.

L. L. TODD, M. D. (*Med. Summary*):

No. 1. For muscular rheumatism, unattended by inflammation or sthenic condition and neuralgia, not accompanied by violent pain, the following has been employed by me with fewer failures in result than any other means: $\mathcal{R}$. tr. guiac. ammoniæ; tr. cisticifugæ racemosæ, vin. colchici, tr. gelsemini, or tr. poke root, aa $\frac{3}{4}$ j. M. Sig.—A teaspoonful in a wine glass of well sweetened water at each meal-time until the bowels are purged; after they become settled, use as at first.

No. 2. For swelled testicles, as of the kind occurring in connection with gonorrhœa: $\mathcal{R}$. Fl. ext. belladonnæ, $\frac{3}{4}$ j; fl. ext. arnicæ, $\frac{3}{4}$ ij; fl. ext. opii, $\frac{3}{4}$ iss; water, to make O j. M. Apply on soft flannel, old linen, or muslin cloths, wrung out of hot water, till the pupils respond to the belladonna thoroughly.

No. 3. Emulsion cod liver oil: $\mathcal{R}$. Best spirit whiskey or brandy, glycerine, aa $\frac{3}{4}$ iv; cod liver oil, $\frac{3}{4}$ vj; mucilage acaciæ (heavy), $\frac{3}{4}$ ij; oil cinnamon, oil nutmeg, aa gtts. xxx. M. Tablespoonful three to five times daily.

No. 4. Expectorant: $\mathcal{R}$. Fl. ext. wahoo, $\frac{3}{4}$ vj; bicarb. potass., $\frac{3}{4}$ iiss; morphia sulph., grs. iij; fl. ext. ipecac, gtts. xl to lx; fl. ext. squill, $\frac{3}{4}$ iss; syr. tolu, to make $\frac{3}{4}$ vj, M. Sig.—Teaspoonful every two or three hours.

No. 5. For chronic or persistent ague: $\mathcal{R}$. Arsenious acid, grs. ij; strychnia sulph., grs. i; sulph. quinine, $\frac{3}{4}$ j; querenes iron, $\frac{3}{4}$ j; ext. gentian,

grs. xx. M. Make pills xl. Sig.—One three times daily after eating. The same formula with the strychnia and arsenic in from 1-20 to 1-30 of a grain, as needed, has been used for many years past as the most reliable remedy in chorea. Same mode of administering.

No. 6. For syphilis: $\mathcal{R}$. Bichloride mercury, grs. iv; iodide potass., $\frac{3}{4}$ iv; fl. ext. stillingia, fl. ext. sarsaparilla, fl. ext. yellow dock, r. prickly ash, aa $\frac{3}{4}$ j. M. Sig.—Teaspoonful after eating, three times a day.

DISEASES OF THE NERVOUS SYSTEM.

Traumatic Tetanus after a Subcutaneous Injection of Quinine.

LURINI (*Raccoglitore Medica*).—The following case of tetanus is etiologically very interesting. The patient, after a long sojourn in the malarial districts of Tuscany, exhibited symptoms of malarial cachexia; increasing debility, sallow complexion, pain in limbs and lumbar region, cough and coryza. Pyrexia every evening. Quinine 1 grm. was administered, and he continued his journey in damp and rainy weather. The intensity of fever increased, with delirium and bronchial catarrh. Quinine in small doses was continued; enlargement of spleen supervened, and the type of the fever was clearly tertian. The continued use of quinine caused a decided apyrexia, but also a general aggravation of all constitutional symptoms, especially a gastric catarrh and great anæmia. Not being able to retain the quinine *per orem* it was decided to inject it subcutaneously.

In eight days, eight injections were made, of from 10—30 C grm. of chinin muriaticum, previously warmed, but which caused always considerable local

irritation, the fever and gastric catarrh subsided, but only to return in a few days in an alarming degree. The place in the arm where the last injection was made became red, then œdematous, which extended to the elbow, temperature 39.5° C. 4 grm. chinine were injected into the rectum but not retained. Fever again subsided, but trismus set in during the night, so that swallowing became impossible, tetanus supervened, which could not be prevented by enema of chloral hydrate, and death ensued at midnight. The inflammatory symptoms in the arm had disappeared.

The chinin was found perfectly pure, free from strychnine and brucine, it was therefore not a *toxic* but a decided *traumatic* tetanus, of which hardly any instances are known. Tamasi Crudilli, however, declared, it is not the first time that hypodermic injections of chinin have caused tetanus. Others challenged this assertion, and called in the *Gaz. degli Ospitali* for communications upon that subject, which was answered by Rossi and Bortolazzi, each had a case to report, the latter has used chinin subcutaneously in over one thousand cases.—*St. Louis Med. and Surg. Journal*.

Stretching of the Lingual Nerve for Neuralgia.

Mr. CLEMENT LUCUS operated recently, for the relief of extreme neuralgia of the tongue, by stretching the lingual or gustatory nerve (*British Medical Journal*). He pointed out what he believed to be an original observation; that if the tongue be seized by the tip and drawn forcibly out of the mouth and on one side, the lingual nerve of the opposite side is made to stand out as a firm band beneath the mucous membrane on the side of the tongue,

where it can be readily felt and secured. The operation was performed as follows: A suture was placed through the tongue to the right of the septum, by means of which the organ was drawn forcibly out and to the left side. A sharp-pointed hook was then passed under the nerve to fix it. The mucous membrane was then divided over the nerve for about half an inch, so that it could be readily seen, and an aneurism-needle having been passed immediately under the nerve, the sharp hook was withdrawn. The nerve was in this way easily reached and stretched.

Periodical Change in the Condition of Hair in Epileptics.

The dependence of variations in the condition of the hair upon the nervous system is well known. Changes in color, lustre, decadence, are observed in the result of affection of the innervation. Two cases are lately recorded of such marked recurring capillary variation in epileptics as to deserve special notice.

Dr. RAÜBER (*Virchow's Archiv.*, vol. 97, July 9, 1884) details with much care a very extraordinary metamorphosis in the hair of the scalp: a fairly large, robust, and well nourished man of twenty-four years, suffered from his fifteenth year from epilepsy. His mother was an epileptic. Mentally, he is little developed, but manages to read and write. Cranium, as compared with the face, rather small. Hair of scalp abundant and light brown; beard and mustache not present but as a scanty down. The epileptic seizures at first occurred daily, then less frequently; post-epileptic stupor then appeared with hallucinations, which made necessary his entrance into the asylum 1881. During the winter up to March, 1883, he had two to five seizures monthly. One evening this month it was observed that during the afternoon

the hair had become curly, lustreless, and foxy red in a narrow strip, running from ear to ear along the anterior border of the scalp. Thence the change advanced backwards until twenty-four hours later the whole scalp was involved, attaining the maximum change on the second morning. The hair of the whole scalp which had been straight, shining, and light brown, was now transformed into a woolly hair without lustre, harsh to the touch, and foxy red in color. Under the microscope some of the hairs exhibited an open fibrous condition in spots, that to the naked eye were white nodules, "trichorrhexis nodosa;" there were often seven to ten such disintegrated spots, also some hairs were split lengthwise, some in their whole thickness, others only partly through. There was also in places partial raising of the cuticular plates, and also of shaft fibres.

Pains had been felt in the scalp the day before the capillary change; the affected hairs could not be touched without pain. The scalp itself did not seem materially swelled or reddened. On the evening of the second day he felt for the first time unwell, went to bed and soon fell into general convulsions with spasm of the pharynx and respiratory tract. This lasted a half hour, when consciousness returned; on the third day the scalp pains began to disappear; on the fourth the hair, inversely to the abnormal change, began to straighten and regain its natural softness and color. Restoration in these respects was complete in about twenty days. In the third month following a new attack took place, though of but twelve days' duration. It was immediately followed by a third, and subsequently up to January, 1884, by others of varying intensity and length, the later attacks being slight. During one attack there was a catarrhal affection of the skin of the

face and partial anesthesia in the territory of the upper cervicals and of the fifth pair.

A second case is reported from the insane asylum in Hamburg. A girl aged thirteen, idiotic, at the age of three began to be affected with chorea, the movements being chiefly confined to the head and upper limbs. Epilepsy appeared between the fifth and sixth years. Admitted into the asylum in 1880, she died there in 1882. While there she had epileptic fits about every eight or fourteen days, and also periods of agitation and calmness alternately, and of a week's duration; while in the former state there was turgescence of the face, pulse full, active transpiration, and at the same time the mental condition was one of extreme obstinacy. The hair, in addition, at such times underwent a change in color, becoming red, the color change commencing at the free ends and persisting for seven to eight days. When she fell into the state of calmness the hair became blonde, the alteration occurring in the space of two to three days; the paler hairs contained more numerous air spaces. Brain and spinal chord were found to be much altered.—*St. Louis Cour. of Medicine.*

Sclerotic Acid in Epilepsy.

From *Le Progrès Méd.* we learn that in December, 1882, four epileptic children were treated with the following solution: $\mathcal{R}$. Sclerotic acid, grs. vijss to xss; distilled water, f. 3 ijss: carbolic acid. grs. xss. M. S. Each injection should contain from gr. $\frac{1}{25}$ to $\frac{1}{12}$.

For hypodermic use, the dose has not been greater than gr. $\frac{1}{12}$. The duration of the treatment was six weeks for one child, which died; six and a half months for two others, and seven months for the fourth.

For internal administration the acid is given in an aromatic adjuvant (*julep*), morning and evening. Eight epileptics have been treated in this manner, the dose of sclerotic acid progressively increasing by about gr. $\frac{1}{2}$ every week. The average duration of treatment for these eight patients was three hundred and fourteen days. Of the twelve patients treated by both methods, only five have been improved. These results are not very encouraging, but, under the circumstances, it may be worth while to experiment still further with this drug.—*Med. and Surg. Reporter*.

Chloride of Gold and Sodium in Some Nervous Affections.

In an interesting paper on this subject (*Med. News*), Dr. ROBERT BARTHOLOW relates some important facts bearing upon the use of gold as a therapeutic agent. Gold is mentioned as a valuable remedy in the treatment of *melancholy* in mediæval history, and afterwards it was used by the Arabians and Italians. Its therapeutic powers are grouped under three heads: 1st., according to its so-called alterant effects; 2nd., according to its action on the nervous system; and, 3d., according to its urinogenital properties. Referring to the preparation used, Dr. Bartholow prefers the double chloride of gold and sodium, which he prescribes in the dose of one-twentieth of a grain. In this quantity, twice or three times a day, it appears to have, as its primary action, the power to promote constructive metamorphosis, to improve the globular richness of the blood, and to increase tissue-strength. The tissues yielding most readily to its use, are the connective and especially those of pathological formation. Hence the remedy is considered especially useful in *sclerosis*, whether nervous, hepatic or renal. In

posterior spinal sclerosis, and in chronic interstitial nephritis, Dr. Bartholow has found the gold salt very efficacious. When used in locomotor ataxia, early and persistently, it has seemed to him to have the power of arresting the disease. Dr. Bartholow has observed excellent results following the use of the gold chloride in many cases of fibroid kidney. In a form of hypochondriasis, coincident with the onset of degenerative changes in the cerebral vessels, he, has found gold and sodium chloride very effective. When persistently used, the uneasiness in the head, the vertiginous and other abnormal sensations subside, the mental oppression at the same time clearing up.

In certain affections characterized by spasm, as asthma, laryngismus stridulus, and singultus, Dr. Bartholow has seen this remedy act surprisingly well. In urinogenital affections the gold has great value, and cases of chronic albuminuria have been observed in which the curative effects of the remedy have been most conspicuous.

In certain cases of sexual debility, in dysmenorrhœa with scanty menstruation, and in chronic metritis the persistent administration of gold and sodium chloride has done much good. Dr. Bartholow indicates the direction in which the remedy promises to be useful, but is of the opinion that wider and more varied experience is necessary to fix its real position. It seems to us from this statement, made by Dr. Bartholow, that the remedy in question possesses very valuable powers, and is destined to awaken considerable interest. Its actions and uses are worthy of most careful study.—*Med. Med. Jour.*

Diagnosis of Peripheral Palsies.

In concluding a paper on "Clinical Aspect of Some Peripheral Palsies," in

the *Med. Times*, Dr. LAMBERT OTT thus expresses himself relative to the differential diagnosis.

"Given a case of localized paralysis, by what points are we to distinguish whether it be central or peripheral?"

Peripheral Paralysis—Generally unilateral and situated in the distribution of an individual nerve.

Central Paralysis—Usually bilateral when spinal, hemiplegic when cerebral.

Peripheral Paralysis—Muscular atrophy.

Central Paralysis—No atrophy, unless multipolar ganglion-cells of anterior horns of gray matter are involved, and in those cases muscles are paralyzed which have different nervous supply, lying on opposite sides of the limb.

Peripheral Paralysis—Paralysis first and atrophy follows.

Central Paralysis—In progressive muscular atrophy there is also atrophy, but paralysis keeps pace with the atrophy.

Peripheral Paralysis—Disturbances of sensation.

Central Paralysis—Seldom marked disturbance of sensation.

Peripheral Paralysis—If of long standing, electro-muscular contractility absent, or the reaction of the degeneration may be found.

Central Paralysis—Electro-muscular contractility only slightly impaired, except in infantile and adult spinal paralysis, where there is either lost electrical excitability or the reactions of degeneration; then the history of the case is a guide.

Paralysis due to compression or inflammation of the nerve presents important differences. In inflammation we have pain or elicited pain on pressure, which is seldom the case in paralysis due to pressure; and, if decided pain is found, we may conclude that there is more or less inflammation. Peripheral

palsies are due to various forms of pressure, such as inflammatory products, cicatrices, callus, tumors, passage of fetal head through pelvis, fecal accumulations, muscular spasm, obstetric forceps, malposition of the extremities, and ill-fitting crutches. Where the pressure is temporary, at first both motion and sensation are affected, but the motor palsy lasts longer and is more profound.

The pathology of peripheral palsies has not been thoroughly investigated. S. W. Mitchell, after some experiments on nerves by compression where post-mortem examinations were made, states "that in all cases were noted some evidences of congestion, but the chief lesion lay in a very extensive disturbance of the contents of the nerve-tubes."

Prognosis is generally favorable. Where the cause has been only temporary and the paralysis partial or incomplete, it will require six to eight weeks to effect a cure. In cases of paralysis with atrophy, the prognosis is not so favorable as to a complete cure, but the palsy may be improved. The electrical condition of the muscles will give the best clue to base a prognosis upon. If there is no diminished electro-muscular excitability to either current, then the case is favorable. If the muscles do not respond to the faradic current, but to the interrupted galvanic, giving $An\ cc > Ca\ cc$, there is hope, after a long time of treatment, of restoring the parts to usefulness. When all electrical response is absent, the case is probably beyond a cure; but even then the interrupted galvanic current should be tried.

Treatment—If the palsy be due to an acute or chronic neuritis, rest, soothing applications and the ordinary antiphlogistic course should be ordered. In chronic neuritis nothing will yield more charming results than blisters over the course of the nerve. Iodide of potas-

sium internally also acts well. Electricity should not be used in acute neuritis. Should the muscles respond to the faradic current, gently faradize three times weekly. If the muscles do not respond to this current, use the interrupted galvanic, placing that pole on the motor point of the muscle which obtains the minimum of contraction from the smallest number of cells. In compression-paralysis, if you find a spot of tenderness in the course of the nerve, use a blister. Otherwise nothing much can be done but to wait, keep up the tone of muscles with electricity, and apply a constant descending current over the course of the nerve, in hopes of producing some healthy change in the nerve-structure itself.—*Weekly Med. Review.*

Chorea Successfully Treated with Chloroform Inhalations.

Before the Liverpool Medical Institution (December 4, 1884), Dr. BOSTICK related the history of a case of chorea in a young girl, wherein conium, chloral, bromide of potassium, etc., all proved useless. Chloroform was therefore given to produce sleep, and a very little had the desired effect; it was, therefore, repeated when necessary. This was continued for eight days; but, as soon as she was allowed to come round thoroughly, she was as violent as ever: the chloroform was therefore given continuously for forty-eight hours, at the end of which time, the movements being much more easily restrained, the limbs were wrapped in cotton-wool, and firmly bandaged to the bed. This seemed to be of great service to her; and, from this time, she gradually improved, and ultimately made a rapid and complete recovery.—*Med. and Surg. Reporter.*

Atropine in Severe Electric Shock.

The rapidly growing use of electricity for illuminating and various industrial purposes, cannot but lead to an increase in the frequency of cases of electric shock, and as no suggestions can be found in our text-books as to the treatment of such cases, an account of three instances reported by Dr. WILLIAM E. EGGLESTON, in which atropine was successfully used, is well worthy of notice. The first of these cases was that of a young man who was struck by lightning; the fluid entering as nearly as can be determined in the region of the right temple, passing thence to the left iliac region and thence to the floor. He rose, walked to the door, stopped, caught hold of the door-frame, did not answer when spoken to and began to stagger. He was caught while in the act of falling, laid on the floor and immediately became insensible. When seen by his physician twenty minutes later he was cold, insensible and limp, pulse and respiration very slow, and the pupils widely dilated. There was no mark on his body or clothes. He was immediately put to bed and thoroughly warmed, $\frac{1}{80}$ of a grain of sulphate of atropine being injected hypodermically. Within a short time after the injection, both the respiration and pulse became more frequent, but it was necessary to repeat it in about two hours, and again in two-and-a-half-hours. An attempt was made to administer stimulants by the mouth, but the act of swallowing seemed to produce a spasm of the pharyngeal muscles and general convulsions. Stimulants were administered by enemata. Consciousness returned in about six hours, when the patient complained of pain in the head, down the right arm into the left iliac region and excessive photophobia. On the next day he had a

hemorrhage from the bowels, which seemed to indicate that the electric fluid had caused a rupture of some vessels in the iliac region, where it passed from the patient's body. He also complained of violent headache, but perfect rest and confinement in a dark room produced in a short time decided change for the better in the cerebral and ocular symptoms, though they did not entirely pass away for more than three months.

The second case was that of a young man who received a shock from a dynamo-electric machine. He walked ten steps, said that his arms and hands felt dead, and then became unconscious. When first seen, about ten minutes after the accident, the hands and fingers were strongly flexed, the head forced back, the pupils dilated and insensible to light; respiration jerking and gasping, shallow and very slow, and pulse slow and irregular, though not very feeble, and the patient almost entirely unconscious. Sulphate of atropine was given subcutaneously in a dose of $\frac{1}{160}$ grain, and within twenty minutes the respiration and pulse became more frequent, and the patient so far recovered consciousness as to be able to swallow some brandy and water. An hour-and-a-half-later the respiration and pulse again became irregular, and the injection of $\frac{1}{80}$ of a grain of atropine was again followed by improvement in twenty minutes. He then steadily improved, and beyond a slight weakness and curious feeling about the head, there were no unpleasant after effects.

The third case was that of a man who received a shock by coming in contact with an electric light wire. He was limp and unconscious; occasional contractions of the hands and fingers; pupils widely dilated; respiration shallow, jerky, slow and sighing; pulse irregular, very slow and feeble; $\frac{1}{80}$ of a

grain of sulphate of atropine was injected subcutaneously, and, as in the other cases, resulted in rapid improvement; though here, also, a second injection was required to counteract a second relapse. Unconsciousness and pharyngeal spasms were so marked in this case that swallowing was absolutely impossible, and brandy and ammonia were injected into the arm. For more than a week afterwards he complained of photophobia and frontal headache, and great weakness of his limbs; but within three weeks these had so far disappeared as to give him no trouble.—*Therap. Gazette.*

DISEASES OF THE URINARY ORGANS.

Prophylaxis and Treatment of Cystitis in Females.

Prof. KÜSTNER, of Jena (*Deutsche Med. Wochenschrift*), says: The most frequent cause of cystitis in females is the carrying in of septic material by the passage of the catheter. Not that it is impossible to pass this instrument without carrying infection, but septic material is very prone to be introduced, especially into the anterior portion where the vesical mucous membrane ends. Insertion of the catheter also often carries vaginal or vulvar mucus or pus, especially in the puerperal state, or after operations. This often causes the origin of troublesome vaginal catarrh. It was observed in Schultze's clinic, that those women who were repeatedly catheterized contracted cystitis in spite of the disinfection of the instruments by carbolic acid. To prevent this, it is necessary to dispense entirely with the instruments now in use, and employ those only which allow of a perfect disinfection.

The instruments made after the au-

thor's plan (O. Möcke, Leipsig), are long glass tubes of the thickness and length of the usual catheter. They have no turn, as this, from the anatomical arrangement of the female urethra, is entirely unnecessary. The opening which is to be passed into the bladder, is cut slanting, edges being quite smooth. Since this catheter has been introduced into the clinic no case of cystitis has appeared which could be said to have its cause in affection through the catheter.

The author observed no case of cystitis under the use of the glass instruments during a long time previous to the giving over of the catheterization to the nurses. The author says that this instrument should only be used in the clinic, and not given to the midwives in private practice.

Concerning the treatment of vesical catarrh, the author agrees with most writers in saying that it should be mostly local. He considered the different instruments used to wash out the bladder, namely, the recurrent catheter, the apparatus with the T-tube, and lastly, Fritch's method with the gum drainage-tube. He then described the instrument which had given him, so far, the best results. This consisted of an elongated glass funnel, the opening which enters the urethra being quite smooth and having a tube attached with a gland-shaped extremity. The tube of an irrigator is filled with disinfecting fluid and drawn over the knob, a tube is attached and placed in the funnel; with a gum arrangement complete separation between the funnel and the other tube can be made. Formerly the author used a weak solution of carbolic acid with which to wash out the organ, but latterly he uses a bichloride solution 1 to 5,000. It is not permissible to inject the bladder oftener than twice a day.—*Nashville Jour. of Med.*

DIGESTIVE TRACT.

Chronic Dysentery Treated by Voluminous Enemata of Nitrate of Silver.

Dr. S. MACKENZIE dissolves a certain quantity of this agent in three pints of tepid water in a Leiter's irrigating funnel connected by India-rubber tubing with an œsophageal tube with lateral openings. The patient was brought to the edge of the bed and made to lie on the left side with hips well raised by a hard pillow. The tube well oiled was passed about eight to ten inches into rectum and the fluid allowed to force its way into the bowel by gravitation. The injection rarely caused much pain, often none. It usually returned promptly; but when long retained it was advisable to inject chloride of sodium to prevent absorption of the silver salt. Various strengths have been used from thirty to ninety grs. in three pints of water, but usually one drachm of the nitrate was employed. The treatment was based on the view that whatever the nature of dysentery, whether constitutional or local, in the first instance, the later effects were due to inflammation or ulceration of the colon, which was most effectually treated as similar conditions elsewhere by topical measures. Sometimes one, sometimes two injections were required, and in some cases numerous injections were necessary; but in all the cases thus treated, many of which had been unsuccessfully treated in other ways previously, the disease had been cured. In most cases other treatment was suspended, but in some Dover's powder or perchloride of iron, which had been previously administered, was continued as subsequently prescribed. The cases narrated were these:

1. Where the disease had lasted several years on and off; two injections were

used and the case was cured in six weeks. 2. Second attack, duration uncertain; four injections used; cured in five weeks. 3. Duration two months; two injections used; cured in three weeks and a half. 4. Duration five years; one injection; cured in three weeks. 5. Duration eighteen months; two injections; cured of dysenteric symptoms, but remaining under treatment for diabetes. 6. Duration fourteen months; one injection; cured in seven weeks. The treatment laid no claim to novelty.—*Brit. Med. Jour.*—*Med. Med. Journal.*

Dysentery.

A writer in the *St. Louis Medical Journal* advises young practitioners never to make fun of an old woman's remedy. They will not only give offence, but may miss a valuable aid in practice. The writer adds: "In 1830, while practising in Madison county, Ill., I was induced by the representations of an old woman, to make the trial in dysentery and diarrhea, of tablespoonful doses of pure cider vinegar, with the addition of sufficient salt to be noticeable, and it acted so charmingly that I have never used anything else."

DISEASES OF RESPIRATORY ORGANS.

On the Substitution of the Preparations of Coca for Cocaine.

Dr. LOUIS JURIST (*Coll. and Clin. Record*).

Immediately after the demonstration of the great utility of cocaine in laryngological practice I began the use of coca in the form of infusion, fluid extract, and lozenges. Although aware of the utility of coca in diminishing irritability of the larynx, I was surprised by its complete success in relieving dysphagia in tuberculosis and syphilis.

In subacute and chronic inflammation of the nose, pharynx and larynx, the preparations of coca were extensively used. The alcoholic fluid extract being found too irritating for the nasal passages, a concentrated infusion (one minim representing a grain of the leaves) was substituted, although even this excites some burning. In acute coryza its local use was supplemented in a few cases, with apparent good effect, by the internal administration of the fluid extract.

In the form of gelatin lozenges, we have used coca, both in combination with aconite and with belladonna, and alone. Alone it has been of very great service in all forms of sore throat, and has been freely and successfully used among our dysphagic patients during the interval of their visits. The combination with belladonna and aconite was found extremely useful in acute inflammations.

In chronic pharyngitis and laryngitis, although many patients declared themselves improved, it did not appear that they were permanently benefitted, the relief consisting principally in the amelioration of the tired uneasy sensation in the throat. One patient complained of a sense of cold following every application. The gelatin lozenges used in the foregoing experiments were prepared according to the following formulæ: $\mathcal{R}$. Ext. cocæ fluid., gr. v. The amount in each lozenge. $\mathcal{R}$. Ext. cocæ fluid., gr. v; tinct. rad. aconiti, gr. ss; tinct. belladonnæ, gr. j. Make one lozenge.

The gelatin vehicle or bases used in these lozenges renders them exceedingly well adapted for the treatment of inflammatory conditions of the throat, as its bland and demulcent character assists the peculiar action of the coca, while their slow and gradual solution in

the mouth allows of the prolonged effect and influence of the coca upon the mucous surfaces. The coca lozenges are also exceedingly useful in laryngoscopy, where the throat of the patient is extremely irritable; for, if several lozenges are directed to be taken at intervals a short time before the examination, the undue sensitiveness will measurably disappear.

It seems reasonable to conclude that coca and its preparations deserve considerable use by the laryngologist. The addition of a fluid extract or infusion to gargles, sprays, mouth-washes, and douches, will aid in relieving pain and controlling irritability.

My experience in operative procedures has been limited to applications *after* removal of hypertrophic mucous membrane, tonsils, etc. On these cut surfaces its anæsthetic effects were repeatedly noticed. When the use of caustic or painful applications is preceded by coca infusion or fluid extract freely brushed over the part (syphilitic ulcerations, etc.), the pain is scarcely appreciable.

Application to unbroken surfaces produced very slight anæsthesia, although undue sensitiveness to examination was always overcome—a fact observed some years ago.

Hypertrophy of the Tonsils.

Dr. Q. C. SMITH, M. D. (*Texas Courier-Record of Medicine*).

As a beginning in the treatment of chronically enlarged tonsils, if there be no ulceration, at least a portion of the redundant tissue should be removed. But if for any reason removal by surgical procedure is not allowed, then the following course of treatment will often prove useful. As topical sorbefacients, we would suggest the following prescriptions:

No. 1.—℞. Hydrate chloral, carbolic acid—pure iodine, camphor *aa.* gr. v., alcohol, one to two ounces. M. Ft. Sol. S. Apply to tonsils with moderate pressure, once every two to four days.

No. 2.—℞. Oleate copper, oleate bismuth, balsam peru *aa.* 3 ss., honey, one to two ounces. Mix. S. Apply to tonsils once or twice a day during the intermediate days of prescription No. 1. As constitutional remedies, we use something like the following prescriptions:

No. 3.—℞. Fl. ext. yellow dock, fl. ext. stillingia, syr. ipecac *aa.* ʒ ii. elix. iodo-bromide calcium comp. qs. ft. ʒ ii. M. Ft. Sol. S. Half to one teaspoonful (for small children) three times a day, just after meals.

No. 4.—℞. Syr. hypophosphite soda (Gardner's is best) ʒ ii. S. Half to one teaspoonful (for small children) three times a day, just after meals. If the patient be decidedly anæmic, the following prescription will be useful and pleasant to take: ℞. Cit. iron and manganese, gr. xxiv, aqua dest., ʒ i., glycerine qs. ft. ʒ ii. M. ft. sol. S. Half to one teaspoonful (for small children) three times a day, just after meals.

Of course, these prescriptions, or something similar, should be varied as to strength, and frequency of application and administration, to suit each case. But whatever drug remedies are used, either topical or constitutional, they should be changed every week and other appropriate remedies used for the same space of time; while in the majority of cases, the patient should be allowed to rest entirely from drug treatment one week out of every three weeks. This course of treatment should be persistently carried out until the patient is cured, which usually requires at least several months.

CONSTITUTIONAL DISEASES.

Carbolic Acid and Typhoid Fever.

Such is the title of an article in the February, 1885, number of the *Archives Generales de Medecine*, by ALBERT ROBIN; an article valuable in that it shows that the administration of carbolic acid in certain infectious diseases, particularly typhoid fever, is worse than useless, and also showing the value of a knowledge of chemistry as applied to therapeutics.

If we analyze a large number of cases of typhoid fever treated by carbolic acid, it is found, says Robin, that the antithermic effect is the only one which really justifies its use. Even then the depression of temperature is only temporary, and to maintain this it is necessary to prolong the action of the drug for a long time—ten to thirty days. But even the partizans of the carbolic acid treatment report: (1) Nervous symptoms, such as ataxic phenomena, convulsions, chills, trembling, etc.; (2) pulmonary complications; (3) colics, nausea and vomiting; (4) profuse non-critical sweats, which are useless or dangerous; (5) symptoms of profound intoxication, with retarded respiration, frequent, small, depressible pulse, cyanosis of the extremities, collapse and sudden death; (6) secondary cachectic symptoms. Though it would seem that these complications should be sufficient to make one hesitate in using the acids in these cases, its strongest partizans maintain that they are due more to the disease itself than to the remedy, and that the same complications are seen in cases treated by other methods. Here the discussion has rested for some time; but Robin believes that he has now shown conclusively that carbolic acid is detrimental to the organism in typhoid fever at least.

His first proposition is that "carbolic acid used in a continuous manner, and in large doses, exerts a disorganizing action on the chemical composition of the liquids and organic tissues by destroying the elements of highest importance to the constitution." It is well known that carbolic acid is eliminated by the urine, and that its quantity is in direct relation with the amount of vegetable ingesta; that it is one of the products of the putrefaction of albuminoid matters, so that the degree of decomposition going on in the body of a person who is taking no vegetable diet may be ascertained by the amount of carbolic acid in the urine. Munk gives the daily quantity of phenol eliminated in a state of health, on an animal diet, as 0 gr. .0011; Brieger gives it as much more, 0 gr. .0150; Robin gives it, as the result of four experiments, as 0 gr. .0079. Observations in five cases of typhoid fever, the patients being fed exclusively on animal diet, showed that the mean was 0 gr. .0304; from which it is easily seen that the production and elimination of carbolic acid in typhoid fever is far above that in the state of health. Whatever carbolic acid is excreted entails a parallel elimination of sulphur and potash; thus still further impoverishing the organism, since these substances are directly removed from it. Therefore, since in typhoid fever a double amount of carbolic acid is eliminated, the same proportion of sulphur and potash must also be lost; and as the patient cannot repair his losses, a daily deficiency results, which, if repeated for a long time, must be of very great disadvantage to the patient. This impoverishment is caused by a process natural to the disease, and should be included as a factor in the genesis of the troubles of nutrition so frequently observed during convalescence.

These things being true, it is necessary to know what goes on in the organism when carbolic acid is administered internally. The oxidation of the acid is less active in typhoid fever than in a state of health, though it cannot be concluded from this that there is a diminished general oxidation in typhoid fever. Robin shows conclusively that the demineralization of the organism, by the removal of sulphur and potash, is one of the consequences of the typhoid state, and that it is considerably increased by the administration of carbolic acid. A calculation will show that the continuous administration of the acid will soon cause a loss of twenty-three per cent. of the total quantity of potash contained in the body; and the same calculation may be made as to the loss of sulphur—two of the most important mineral ingredients. How is the system affected by the loss of two of its principal histogenetic elements, the most indispensable to life? The animal deprived of its mineral salts is soon attacked with muscular feebleness and trembling; in the lower limbs this muscular feebleness takes the characters of a true paralysis, as though the cord were deprived of its functions. The mental faculties are affected and excitability is heightened; and death supervenes with convulsive movements, respiratory troubles, and visceral steatosis. It certainly seems clear that any drug which may induce such results should be strictly proscribed in typhoid fever. Not only this, but all the organic compounds which are eliminated in the same manner as carbolic acid should also be proscribed. The following is an incomplete list of such compounds, most of which have been vaunted as antiseptics or antipyretics: Creasol, paracreasol, metacreasol, thymol, naphthol, pyrocatechine, resorcine, hydro-

quinone, methylhydroquinone, pyrogallol, tribromophenol, orthonitrophenol, vanilline, vanillic acid, benzol, naphthaline.—*Jour. Amer. Med. Association.*

A Peculiar Skin Eruption in Typhoid Fever.

Dr. ALEXANDER reports the following interesting case in the *Vierteljahrschrift f. Dermat. u. Syphil.*, 1885, p. 115 :

A robust man, æt. 20, suffering from typhoid fever, was placed, on the eleventh day of his illness, into a permanent warm bath to prevent the further progress of a very bad bed-sore. The next day the condition of the patient was decidedly improved, the bed-sore did not increase in size and gradually healed, but during the next few days there developed itself on the back of the patient a daily increasing number of papules, which were from the size of a split pea to that of a five-cent piece, and had a peculiar brown color. These papules then formed pus in their centre, but retained for a long time their color and hard consistence, and they still were profuse when the patient finally left the clinic, completely cured of the typhoid fever, but by no means of the eruption. He refused, however, to remain longer in the hospital.

Dr. A. is of the opinion that this exanthem belongs, according to its anatomical as well as its genetic relations, to the so-called acne cachecticorum. Dr. Leivinski mentions in the *Centrbl. f. d. Med.* that he has met with similar cases, but the papules neither so large nor so profuse as in Alexander's case. The bath can have acted only as an accidental exciting cause, for this kind of eruption has never been observed as a consequence of the permanent bath; there always existed some predisposing influence and generally a lowered state

of the system at large, a cachectic condition of some kind. Most of the cases thus far reported happened near or during the convalescence from low fevers, especially typhoid fever, but never during the acme of the disease—an indication that it is probably due to disturbed nutrition and the poor state of the blood. The eruption has never occurred in mild cases of enteric fever, but the writer of this has once attended a case where, in consequence of a neglected hip disease, amyloid degeneration of liver and kidneys had developed itself in a child, that by the continuous drain of purulent matter, discharging from a number of sinuses at the hip, had been gradually brought into a cachectic condition. The papules here also showed themselves after the child, a girl *æt.* 9, had taken for one week a bath of salt water once daily, each time for about twenty minutes. The baths were then discontinued, and first a local treatment, consisting of the application of zinc ointment and one per cent. of corrosive sublimate to the papules, and later the internal administration of Fowler's solution, were persevered in for a month, without, however, much influencing the papular eruption. At my advice the child was operated on, the diseased part of the bone removed, and the patient sent to the seashore, where she remained for nearly four months. It was not until the beginning of the sixth week of her sojourn near the sea that the papular eruption commenced to fade away. First the ulceration ceased and the skin disease completely assumed the character of lichen obtusus, each papule having a slight central depression. Later, the papules became less hard and paler, until finally, during the twelfth or thirteenth week of her residence at the seashore, nothing but a few spots were left, which somewhat

resembled marks of mild cases of variola, with the only difference that but one central pit existed in each spot. By that time the general condition of the patient also had greatly improved, though this improvement was but a transient one, the amyloid degeneration evidently having proceeded too far ere the operation was performed to allow a speedy cure. Once more, frequent baths were ordered and taken, and the whole condition of the patient once more, and this time permanently improved, but the same eruption did not again make its appearance, the probability being that the nutrition in general and the state of the blood did not again become so much impaired as to produce that cachectic condition, a fact which seems to be essential for the development of this form of acne. Its presence or absence, therefore, may at times serve as an indication and factor upon which to base an otherwise doubtful prognosis.—*Med. & Surg. Reporter.*

Oil of Wintergreen in Acute Rheumatism.

Dr. J. A. WESSINGER (*Medical Age*): During the past week two cases of acute articular rheumatism came under my observation, in which the local application of the oil of gaultheria was accompanied with very gratifying results.

On January 11, I was called to see Mr. J—, who had always enjoyed good health, had never been addicted to the use of alcoholic stimulants. I found the patient suffering from acute articular rheumatism at the right-ankle joint, and also in the great toe of the same foot. Pulse, 85; temperature, 100°. I immediately ordered local applications of the oil of gaultheria to the painful joints every hour, and the limb wrapped in a woolen cloth. At noon, or four hours from the time I first saw the pa-

tient, the pain had not abated in the least ; other symptoms about the same. I then ordered the ankle and toe to be saturated with the oil every half hour. At night I again saw the patient, at which time the rheumatic pain had very materially abated. I ordered the treatment continued the same as before. On the morning following, the patient was able to walk with very little discomfort, and was otherwise feeling quite well. At this visit I discontinued the case.

Case 2. P. E.—, æt. 8, has always been quite healthy until the morning of February 3, when he was taken with severe pain and swelling in the knee and ankle joints of both limbs. I saw the patient on the afternoon of the same day, and, from the condition as presented, my diagnosis was acute articular rheumatism. Temperature 102° , pulse 90. I immediately ordered local applications of the oil of gaultheria every half hour, and the limbs wrapped in woolen cloth. I also ordered grain doses of sodium salicylate in solution, as an antipyretic. On the morning following patient thought the pain less intense than on the day previous. Temperature $101\frac{1}{2}^{\circ}$, pulse 90. Treatment continued the same as before.

February 5. Patient is able to walk and feels much relieved ; pain almost entirely gone ; swelling reduced ; temperature 101° . I ordered local applications of the oil continued, and increased the dose of sodium salicylate to two grains every hour, under which treatment the temperature came down to normal during the succeeding twenty-four hours. From this date the patient made a rapid recovery. Should other cases of this difficulty present themselves in the future, I shall administer the oil of gaultheria, both locally and internally. I certainly see no reason why much good cannot be done in these

cases by the internal administration of this remedy.

Oil of wintergreen, although only recently introduced in the treatment of this malady, promises to be a very valuable addition to the therapeutics of acute articular rheumatism. Its action in this condition is, no doubt, owing to the salicylic acid which it contains, since we learn in chemistry that one of the most interesting compounds derived from wood-spirit is the salicylate of methyl, or oil of wintergreen, which is extracted from the flowers of the gaultheria procumbens, and was one of the first vegetable products to be prepared artificially by the chemist. It is obtained by distilling wood-spirit with sulphuric acid and salicylic acid, the latter acid being formed by the action of fused hydrate of potash upon salicia extracted from willow bark.

Empyema, Paracentesis and Drainage.

Dr. E. F. INGALS read a paper having this title. After referring to the methods of operating with the aspirator needle, free incision and sudden evacuation of pus, the exsection of one or more ribs, etc., he stated that a large ratio of fatal cases, where the radical operation had been made, is due to the operation itself in some of its forms. This however must not be taken as an argument against any operation, for recent statistics show that much a larger percentage of cases do now recover that have been operated upon by better methods, than if left to themselves.

A good result will more frequently follow an operation that will enable us to empty the cavity slowly, and at will, and simultaneously keep the cavity thoroughly disinfected. Aspiration will not meet these requirements completely in many cases, therefore, a radical operation for free drainage must be made.

Yet it is best to precede a radical operation by aspiration, withdrawing the pus, several times if necessary, in order that dilatation of the lung and contracture of the chest walls may proceed to such an extent that all the fluid may be removed at one time without causing a distressing sense of compression of the chest and suffocation. When this has been accomplished a few days should be allowed for the cavity to partially refill. Then the operation for permanent drainage should be made. To secure proper drainage and prevent the loss of drainage tubes in the pleural cavity, the tubes should be prepared as follows: A piece of the best rubber tubing two feet long, nearly a quarter of an inch in diameter, with a calibre of an eighth of an inch, should be selected. This is cut half through near its middle so that when folded the two pieces are fastened together at a point about one and one-half inch from the cut with a silk suture, which is tied on the inside of the perforated tube. This suture keeps the tubes in the same relation to each other and thus prevents one of the annoyances incident to the use of drainage tubes that are not so fastened. One portion of the tube should be perforated about an inch from the cut, and the other portion in several places extending from near the cut three or four inches along that portion which is to hang within the chest. As a matter of convenience, the outer ends of the tubes are tied tightly so that pus will not escape through them while they are being introduced. The length of the tubes should be recorded so that we may know subsequently just how far they extended into the cavity. The difference in the length of the two tubes enables us to know in which one there are several perforations, a matter of importance in the subsequent treatment.

Immediately before the operation, an aspirator needle or a hypodermic syringe may be tried again to avoid making an opening when adhesions have bound the pleural surfaces together, and to insure an entrance into the cavity. An incision should be made through the skin about one-fourth of an inch long, through which a broad flat trocar is plunged into the pleural cavity sufficient to allow the easy passage of the two drainage tubes, which should then quickly as possible be introduced into the cavity to the required depth, the canula is, of course, withdrawn and the tubes left *in situ*. By careful manipulation entrance of air will be prevented and the tissues will contract closely about the tubes. A piece of sheet rubber about three inches square, with two small openings near the centre is then slipped over the tubes down to the chest wall, where it will act as a valve to prevent the ingress of air in case the tubes should become loose. In addition to these precautions to secure the tubes perfectly, a section of the same tubing half an inch long, through which have been tied two loops of strong cord, are slipped over each tube, with the aid of a canula; these are carried down close to the chest-wall and slipped off on the tubes which they fit so closely, that slipping is impossible. Long strips of adhesive plaster are then passed through the loops and around the chest, which thus places the tubes perfectly under our control. Over the whole is placed a bandage, between the folds of which hang the drainage tubes, which are then opened and long pieces of glass tubing are attached. The pleural sac is then washed out with a two per cent. solution of carbolic acid at 101° F., first through one tube and then through the other, until the cavity is clear. After this procedure, the ends of the tubes are folded upon themselves and tied

so that they are hermetically sealed. Subsequent cleansings should be made two or three times a day. The physician need not call oftener than two or three times a week after a day or two, to assure himself, if necessary, of any change in the injection to secure speedy obliteration of the cavity. In the meantime the washing out of the cavity may be done by friends, or by the patient.

In two weeks time after the operation one of the tubes may be left open, hanging in a bottle which the patient carries in his pocket. In cases of long standing, in addition to the above method, resection of one or two ribs may ultimately be necessary to cause complete closure of the pleural sac, and the patient's chances are greatly enhanced to recovery by adopting the first method. The operation for introduction of drainage tubes and other methods just described, possess the following advantages:

1. It may be quickly and easily performed without an anæsthetic.
2. It enables us partially or completely to empty the chest, being governed by the effect it produces upon the patient.
3. It is free from one great risk incident to free incision into the chest, viz.: As a result of the sudden evacuation of pus and the free entrance of air, many patients die from the operation within a few hours.
4. Air may be excluded from the cavity for several days if care is used, or at most but a few bubbles may enter if the tubes are opened under water.
5. The drainage tubes are held securely and cannot slip into the chest.
6. The opening is closed so snugly as to almost wholly prevent the discharge of pus, except through the tubes, thus enhancing the comfort of the patient.
7. As a nurse may readily cleanse the

pleural cavity, the subsequent treatment is rendered much simpler and easier than where a free opening has been made.

8. In chronic cases where resection of a rib or of portions of several ribs may be necessary, this is the best possible preparation of the patient for that operation.

9. Eighty per cent. of the patients operated on in this manner will recover.
—*Weekly Med. Review.*

Electro-Therapeutics.

Abstract from *Texas Courier-Record of Medicine.*

Our own American writers, and especially BEARD and ROCKWELL, have done more to give us the true status of medical electricity than all of the other authors combined, and as they have been particular to give us the differential indications for the use of the two currents, and also give us the advantages of one or the other current in different pathological conditions, and as this has not been done in a systematic manner by any other authors, I think that a reference to them on this question will be duly appreciated.

In giving the general differential indications for the use of the two currents, they say that the Galvanic current should be used:

1. To act with special electrotonic and electrolytic power on the brain, spinal cord, sympathetic or any part of the central or peripheral nervous system.
2. To produce contractions in paralyzed muscles that fail to respond to the Faradic current.
3. In electrosergy to produce electrolysis or cauterization.

The Faradic current should be used to act mildly on the brains, spinal cord,

sympathetic, or any part of the central or peripheral nervous system.

Second, to excite contraction in paralyzed muscles, and to produce strong mechanical effects.

The advantages of the Galvanic over the Faradic current are :

1. Greater power of overcoming resistance.

2. A greater power of producing contraction in paralyzed muscles in cases where the Faradic fails.

3. A far more potent electrotonic, electrolytic and thermic action.

The advantages of the Faradic over the Galvanic are :

1. By virtue of its frequent interruptions it more easily produces muscular contractions when passed over the muscles and nerves which supply them.

2. It produces greater mechanical effects.

3. It is less likely to produce unpleasant and harmful effects when incautiously used.

Now a proper analysis of the above indications and advantages would require more space than it is possible for me to allot to this paper, but I will state in general terms that the cases which can be subjected to the beneficial effects of the Faradic current will far outnumber in general practice those that require treatment exclusively by means of the Galvanic current. In the first place we see that when we wish to produce electrotonic or electrolytic effects on the brain, spinal cord, sympathetic or any part of the central or peripheral nervous system, that the Galvanic current has the advantage, although the Faradic will accomplish all these only in a milder degree.

We will take, for instance, a case of neuralgia of the fifth pair of nerves, and it may disappear almost as if by magic under the influence of the Galvanic cur-

rent, but at the same time it may be cured by more persistent efforts with the Faradic current. In some cases of paralysis the Faradic current is utterly useless until after the nerves supplying the affected muscles have been subjected to the influence of the Galvanic stimulus, and then the cure may be completed with the Faradaic current. These cases, however, are rare, a vast majority of cases of paralysis will yield to treatment by the Faradic current alone. Its greater power of overcoming resistance imparts to the Galvanic current a far greater degree of usefulness in treating obstinate and long standing cases of functional diseases of the brain, spinal cord and sympathetic nervous system.

In electrolysis, and as a cautery, only the Galvanic current can be used with any benefit.

In the destruction of tumors, in cases where it would not be best to remove them by excision, in cases of stricture and cases of irritable urethra, in cases of chronic granular conjunctivitis, and finally I will mention cases of extra uterine pregnancy ; in all these the use of the Faradaic current can never be substituted for the Galvanic. "By virtue of its frequent interruptions the Faradaic current more easily produces muscular contractions when moved over the muscles or the nerves which supply them."

It is *this* property of the Faradic current which extends its beneficial results to almost endless limits.

It is to this property, which by giving passive exercise to all the tissues, both superficial and deep-seated, which may be brought under the influence of the current, that we may attribute its remarkable *sedative* and *tonic* effects.

It is by virtue of this property that we are enabled to produce contraction

of paralyzed muscular tissue, and to restore tone to the nerves which supply it, and, at least, to arouse latent force in the centres from which they emanate.

It is from this property that we derive benefit in cases of fatigue and exhaustion of muscular tissues. It refreshes and restores them at once to their former vigor, as in obstetric practice, where it is used to assist the uterine and abdominal muscular fibres in overcoming the resistance offered by the passage of the fœtus through the pelvic outlet, and to prevent exhaustion of these same structures after the work has been completed.

And, finally, this is the current which can be used with the most benefit in all acute inflammations, for its *sedative effects*.

I cannot close this paper without referring to what Beard and Rockwell say as to the Faradaic current being less likely to produce unpleasant or harmful effects when incautiously used. This proposition I consider to be strictly true: when the Galvanic current may be improperly used, permanent direful results may be accomplished in a very few seconds, and the patient nor the physician not be aware of it until after the mischief has been wrought. But this cannot be the case where the Faradic current is used; for, if the current should be used entirely too strong, the pain produced by it would soon warn the physician and patient, and it could be moderated or suspended.

The worst effects that I have ever seen from the use of the Faradic current is that it will sometimes overstimulate the cardiac nerves of inhibition and produce syncope, but I have never seen this occur after the first few treatments and the system had become habituated to the electrical stimulus.

Now, as we see that the Faradic cur-

rent is the safest and the cheapest, and the Faradic battery is the most portable, and that it can be used with benefit in a far wider range of diseases, in my opinion, "it is the best form in which it can be used with benefit."

Tests for Identity and Purity of Cod-Liver Oil.

Mr. A. KREMAL gives the following method for distinguishing pure cod-liver oil from the spurious oils, based upon their behavior toward fuming nitric acid, specific gravity 1.500.

If ten to fifteen drops of the respective oils be poured on watch-glasses, and two or three drops of fuming nitric acid are slowly poured in from the side, the several oils exhibit the following appearance:

1. Genuine cod-liver oil (from *gadus morrhua*) turns *red* at the point of contact, and afterward when stirred with a glass rod it becomes fiery rose-red, soon passing over into pure lemon-yellow.

2. Coalfish oil (from *gadus carbonarius*) turns intensely *blue* at the point of contact; when stirred it turns brown and remains so for two or three hours, when it finally passes likewise into a more or less pure yellow.

3. Japanese cod-liver oil behaves like the preceding, except that red streaks are sometimes observed along with the blue ones on the addition of nitric acid.

All three varieties likewise yield the well known color reaction for biliary acids with sulphuric acid. Two different kinds of cod-liver oil appear to be exported from Japan, since Gehe & Co. report having met with one which did not give this color reaction.

4. Seal oil treated as above stated at first shows no change of color and becomes brown only after some time. As this oil is not a liver oil, it of course

does not give the reaction for biliary acids.

According to the author this reaction with fuming nitric acid is so intense and characteristic that admixtures of them (of not less than about twenty-five per cent.) to genuine oil may be readily detected.—*W. Druggist.*

Explosive Mixtures.

Whilst coming to the office this morning the writer was requested to express an opinion relative to the explanation of an explosion which had repeatedly occurred in a mixture containing fl. ext. buchu, fl. ext. uvæ ursi and spiritus etheris nitrosi. The explanation which we ventured was that one or both of the fluid extracts in question contained glycerine and that the explosion was caused by the development of a certain quantity, if not of nitro-glycerine, of some other kindred compound. Whether the explanation is correct or not, it is a fact that spiritus etheris nitrosi is a very unstable compound, and if it is found necessary to add to it other ingredients, glycerine mixtures should be greatly diluted, in which case the preparation would probably not keep long; or, what would probably be better, the glycerine preparation should be avoided. The fact was furnished us by a reliable and careful druggist, and we have frequently experienced explosions from the mixture given in Stirling's book on Practical Histology under the heading "Dissociating Solutions." This dissociating solution is made of nitric acid, one part, and a mixture of water and glycerine (3 of water to 1 of glycerine), four parts. Of course we are aware that it would be illogical to draw conclusions from an explosion occurring in the said dissociating solution, in explanation of the pharmaceutical preparation referred to,

but the similarity of the ingredients have been deemed sufficient to associate them by way of a temporary explanation.—*Weekly Med. Review.*

Non-Penetration of the Lining False Membrane an Unnoticed Danger in Tracheotomy.

Under this heading, Dr. ASHBY G. OSBORN thus writes to the *Brit. Med. Jour.*, January 19, 1885 :

In a recent operation for laryngo-tracheotomy on a child about four years old, for croup, where the general condition and the absence of lividity seemed to promise a favorable result, I was baffled at finding, after the insertion of the tube, that but one feeble inspiratory effort with the well known "whiz" of entering air was made, and that artificial inflation failed to distend the lungs.

Though an examination with the finger showed that the tube had entered the wind-pipe, artificial respiration was fruitless, and I had the pain of seeing my little patient die during the operation.

A necropsy revealed the difficulty; the opening into the larynx had been made rather on the right side of the median line, and Fuller's bivalve tracheotomy tube had passed down between the trachea and the false membrane, thus pressing together the sides of the lining tube of false membrane, and preventing the passage of air.

A freer opening into the larynx or trachea would render it less likely that a false membrane could escape division; and I hope, by placing this failure on record, that more stress may be laid on the importance of this point, as insisted on in the excellent text books of Holmes or Bryant, where though a free opening of the normal tissues is recommended, no mention is made of the risk of the

canula in its passage pushing before it the undivided false membrane, as happened in this instance.

Nor is the danger alluded to in the discussion which followed Dr. Buchanan's paper on tracheotomy, at the International Medical Congress of 1881. Thus, from the silence of those who have frequently operated, it would appear that this source of danger has not often been met with.—*Med. and Surg. Reporter*.

The Therapeutic Properties of Thyme.

CAMPERDON concludes a long article on this subject with the following deductions: 1. In therapeutical doses (three to fifteen grains) the essence of thyme causes mental excitement or stimulation; hence it is a valuable diffusible stimulant in depression following anæmia, in conditions of collapse, etc. 2. It is an active diaphoretic and diuretic. 3. From its direct action upon mucous surfaces it is to be recommended in catarrhal affections of the respiratory and genito-urinary tracts. 4. It is a prompt hæmostatic. 5. Thyme possesses powerful antiseptic properties, and is well adapted for use in surgery. 6. It is recommended that the internal administration of the drug be supplemented by its employment in the form of baths, fumigations, and inhalations.—*Midland Medical Miscellany*.

Action of Bromide of Zinc.

Recent experiments instituted by Dr. TESTA have led their author to the following seven conclusions: 1. Bromide of zinc produces in small doses as first effect a diminution of sensibility; in larger quantities it depresses the motor apparatus, achieving finally complete paralysis. 2. The motor and sensitive embarrassments disappear

gradually, provided the quantity of the drug administered be not too excessive.

3. Bromide of zinc arrests the heart of a frog in its diastole, but more slowly than zinc alone. 4. This effect is the more attributable to the zinc, as other bromides, the bromide of potassium for example, act simultaneously on motility and sensibility. 5. Bromine, associated with zinc, causes in different mammals great somnolence, which zinc alone is incapable of producing. 6. Bromide of zinc acts primarily on the peripheral extremities of sensory nerves and secondarily on the spinal cord and the efferent nervous branches. 7. The somnolence seems to refer to a cerebral difficulty, but the phenomena observed in the sphere of sensibility and motility are distinct appearances.—*Revista Clinica e Therapeutica*.

Erysipelas and the Antiseptic Method.

M. VERNEUIL read a paper with this title at the meeting of the French Academy of Medicine, February 24, 1885, comparing the results of treatment with and without antiseptics. The following conclusions were reached:

1. Erysipelas, an infectious, contagious, auto-inoculable disease, has many causes which it will for a long time yet be difficult to suppress.

2. In our great centres erysipelas essentially endemic is perpetuated at two distinct sources: the one exterior, the city, the other interior, the hospital, which reciprocally poison one another.

3. We have little direct hold upon the endemic of the city or upon the sporadic cases of the interior. Nevertheless, we have much more hold upon the hospital centre. Here we can in great measure prevent the appearance and extension of the trouble by minute precautions against auto-inoculation, by antiseptic

dressings, by isolation if it is practicable, and in lack of that, by the creation around the patient of a circumscribed antiseptic atmosphere.

4. The diminution of erysipelas in the surgical ward not only renders the ward more wholesome, but does the same for the whole hospital and the quarters tributary to that hospital, as conclusively demonstrated by the considerable diminution of erysipelas cases coming from it.

5. If the prophylactic and curative resources, whose efficacy science has demonstrated, were rigorously and generally applied in city and hospital, we might hope that erysipelas would become rare, like pyemia, and possibly disappear completely, like hospital gangrene.—*L'Union Médicale*.—*St. Louis Med. and Surg. Journal*.

Inflammatory Diseases.

In inflammatory diseases, when patients cannot sleep, but require it, and unless there exists some contra-indication, Prof. GROSS prescribes :—℞. Potassii bromidi, 3 ss. ; chloral., gr. xv. ; morphinæ sulphat., gr. $\frac{1}{2}$; syrup. aurant. ; aquæ, aa 3 j. M. Sig.—*Pro re natâ*.—*Coll. and Clin. Record*.

DISEASES OF THE URINARY ORGANS.

Effect of Ether on Urinary Secretion.

Dr. C. H. HUGHES, of St. Louis, contributes a clinical note on ether in the following communication to the *New England Medical Monthly* : Ether douches for local anodyne, antipyretic and antihyperemic influence, have been for a quarter of a century a favorite therapeutic procedure with the writer, and within the last decade especially have been quite extensively employed for the immediate relief of cerebro-spinal pain and for causing the suspension of acute

delirious states, the patient so affected being placed near an open window in a large and otherwise unoccupied room and the ether being profusely poured on the head and fanned rapidly and constantly away (always from the face) until evaporation is complete and cerebral quiescence is secured, pending the administration of internal tranquilizing agents. This use of ether has been communicated to the profession before. The purpose of the present note is to call attention to an incidental effect of ether douching, viz. : The suppression and diminution of the urinary secretion under its frequently repeated use. This effect has hitherto been observed by the writer, but the effect having been transient, and the ether not having to be often repeated in most cases, the occurrence of suppression was attributed to other causes.

But some cases lately observed have convinced the writer that ether long continued in large quantities will suppress the urinary secretion, if care be not taken to prevent inhalations.

The last case in which this effect was observed, was a lady over sixty years of age, having accessions of delirium usually without fever, but sometimes with a temperature of 101° , and insomnia, with a present and previous history of petit mal. The applications were directed in the case *pro re nata* and intrusted to other (non-professional) hands than my own. The amount of urine secreted fell to six ounces in twenty-four hours. An examination of this urine revealed no marked excess of its salts as shown by specific gravity test. For lack of time no other test was made. There was no albuminous or saccharine change.

The repeated recurrence of this phenomenon and the prompt return of the normal amount of urine under diuretics

and the suspension of the ether applications were convincing.

We find in this fact a new resource in polyuria.—*Weekly Med. Review.*

Pepsin as a Solvent of Blood-Clots in the Bladder.

The editor of the *Northwestern Lancet* calls attention to a novel use of pepsin in surgery. In a case of distended bladder, when clotted blood prevented evacuation, he dissolved a scruple of Jensen's crystal pepsin in an ounce of warm water, and in less than twenty minutes had the satisfaction of seeing the patient pass a full stream of urine and disintegrated blood.—*Jour. Amer. Med. Ass.*

Cocaine in Chronic Cystitis and Irritable Bladder.

If all that is claimed for cocaine is made good, it will truly turn out to be one of the most valuable additions that has ever been made to our materia medica. Dr. F. F. GERMAN thus writes to the *Lancet*:

I have been treating a gentleman, over sixty-eight years of age, for chronic cystitis, bladder sacculated, dependent on prostatic disease; latterly, the symptoms have been much aggravated, micturition every few minutes, with intense pain at the neck of the bladder, thick muco-purulent discharge when the bladder is washed out (twice daily with boroglyceride), and diarrhœa. Almost every remedy has been used—by mouth, injections, suppositories—all fruitlessly. A fortnight ago I injected into the bladder one-third of a grain of hydrochlorate of cocaine in four or five ounces of tepid water; it was retained for ten minutes. Next morning I was pleased to find he had been perfectly free from pain, and the diarrhœa soon ceased. I have since used it four times,

the freedom from pain lasting from twenty-four to thirty hours, but the frequency of micturition and quantity of sediment remain unaltered. The last few days he has complained of similar pain along the urethra, and I intend using the gelatine bougies medicated with cocaine, as suggested by Mr. Bellamy.—*Med. Surg. Reporter.*

Urethral Spasm in the Female Relieved by Cocaine.

Dr. GEORGE NEWELL HALL writes to the *Med. Record*, that he was called to see a married lady, twenty-five years of age, who was suffering from retention of urine and considerable pain. She stated that she had been subject to these attacks from childhood, and had taken opium for their relief from the time she was thirteen years old. The spasms lasted, as a rule, for forty-eight hours, and were accompanied with considerable pain and a constant desire to urinate. An attempt to pass a catheter was unsuccessful. A grain and a half of cocaine was then dissolved in an ounce of water, and the catheter being introduced as far as the obstruction, about half of the solution was injected into the urethra. In about five minutes the catheter was again introduced, and passed with ease into the bladder.—*Ibid.*

DISEASES OF THE NERVOUS SYSTEM.

Observations on the Cutaneous and Deep Reflexes.

Dr. P. C. KNAPP, of Boston, records, in the April number of *The American Journal of the Medical Sciences*, a series of observations, upon the cutaneous and deep reflexes of 239 persons, from which he draws the following conclusions: 1. Absence of the plantar or cremaster reflex is usually pathological, depending upon a direct lesion of the reflex arc, or

some cerebral disturbance. 2. Absence of the other cutaneous reflexes is not necessarily pathological. 3. Absence of the patellar reflex may be due to cerebral disturbance, especially in alcoholic subjects. 4. Ankle and patellar clonus are pathological. 5. The deep reflexes of the upper extremity are of frequent occurrence, and have no special pathological significance. 6. The costal reflex is found in the majority of cases without general exaggeration of the reflexes, and with no signs of phthisis, incipient or advanced. 7. When the reflexes differ on the two sides, though it usually signifies some unilateral disease of the nervous system, it is not always pathological. Finally, his observations have led him to emphasize the value of testing all the reflexes, cutaneous and deep, in the upper extremity as well as in the lower, and on the two sides of the body, in examining patients with nervous diseases.—*Med. Record.*

Ether Douche and Galvanism.

In the same article Dr. HUGHES relates the following incident :

The danger of using the ether douche and static electricity at the same time, revealed itself to the writer in an incident which happened to one of his patients recently. The patient was being treated for a cerebro-spinal trouble, and had received a descending fronto-cervical constant current and a liberal douche of sulphuric ether to the top of the head. The patient was immediately thereafter conducted to the static insulated stool, and as the roller was applied up and down the spine, the ether on the head ignited. The patient had on a wig, which caught fire, but the fire was promptly suppressed—though it for a moment blazed up brightly—by clapping hands on the burning head and smother-

ing the flames. The precaution to be deduced is to never apply ether till after the use of the static battery, when the latter and the former are both indicated.—*Weekly Med. Review.*

The Use of Jamaica Dogwood in Neuralgia Followed by Uterine Hæmorrhage.

In the *Southern Practitioner*, Dr. C. P. McNAB reports having been called to attend a woman, aged 32, about one month after the birth of a child, who complained greatly of severe supra-orbital neuralgia. The process of involution of the uterus had well advanced, and the lochia had entirely disappeared. The pain was relieved by the hypodermic use of morphia, and thirty drops of the fluid extract of Jamaica dogwood were directed to be taken every hour, should the pain recur, until relief was obtained. As her neuralgia returned in the same evening, the remedy was used as prescribed for four hours, with the effect of relieving the pain altogether. A slight hæmorrhage from the uterus made its appearance, which was attributed at first to the regular catamenial flow, the patient being unusually plethoric, having menstruated regularly while nursing her last child. She was directed to continue the use of the remedy should the pain return. The next day, severe pain returning in the right orbit, the remedy was again administered and thirty minims repeated in an hour. The pain was then again, for the second time, relieved, but the hæmorrhage was increased to an alarming extent. Fluid extract of ergot was then administered, and controlled the hæmorrhage. Subsequently the Jamaica dogwood and the fluid extracts of ergot were combined, and were administered subsequent to this as before for the relief of neuralgia, in each instance successfully and with no further trouble as regards the pro-

duction of hæmorrhage. Dr. McNab points out that, although this remedy is most successful in curing neuralgia of the fifth pair of nerves, it must be administered with caution in all cases where uterine hæmorrhage exists, or where from surrounding circumstances it might be anticipated.—*Therapeutic Gazette*.

DIGESTIVE TRACT.

Some Recent Observations on the Treatment of Dysentery.

The good effects of various remedies in the treatment of dysentery are frequently questioned by writers of large experience. On the other hand there are those who insist on the power of drugs to cut short an attack of the disease. Among recent contributions to this subject we find the following: Dr. SEATON is very emphatic as regards the utility of ipecacuanha powder. The remedy, though an old one, is thought by many practitioners to be applicable rather to the tropical forms of the disease, than to the dysentery of our climate. Dr. Seaton, however, considers ipecacuanha the best medicament against the disease, and administers it as follows: 1, abstinence from liquids two hours; 2, introduction into the rectum of an opium suppository; 3, application, twenty minutes after, of a poultice of linseed meal and mustard over the epigastrium; 4, ten minutes after, the administration of forty grains of the powder of ipecacuanha root, in a biscuit or in water, which is followed by a tablespoonful of milk or rice-water, to aid its deglutition; 5, the patient is recommended to keep the recumbent position for two hours at least, abstaining from any drink. Administered in this manner, this medicament has been, in the

author's hands, in hundreds of cases, as efficient as quinine in malarial fevers. Dr. Rosenfeld employs and recommends iodized phenol, especially for the dysentery of children. The drug consists of a solution of about four grains of pure iodine in one and one-quarter ounce of glycerine, to which about four grains of carbolic acid are added. One to two teaspoonfuls of this mixture are administered three or four times a day in a glassful of water as an enema. A sensation of warmth in the abdomen is followed by a substitution of green stools for the former bloody ones, and in the course of a day or two the only remaining trace of the malady is a slightly mucous diarrhœa. In a severe epidemic of dysentery, in which eighty per cent. of those attacked were under ten years of age, and forty-nine per cent. between one and three years of age, only six died out of 142 treated in this way. According to the *London Medical Record*, March 15, 1885, Dr. Schtchegloff, of Jisdra, Kaluga Government, has tried carbolic enemata in twelve cases of acute dysentery, and obtained most striking results. Six of the patients (all peasants and soldiers) left the hospital after three days' treatment, three after four days, one after six days, one after nine days, and one after ten days. In two of the cases the carbolic treatment was resorted to after other means (calomel, starch, and opium enemata, tartaric acid, etc.) had failed. In the remaining ten, the patient on his admission had six drachms of castor-oil, as well as wine and tincture of valerian (according to the state of his pulse). On the next morning an enema, made of six or seven pints of a carbolic solution (1 to 500), at the temperature of 27° R. (92.75° F.), was administered. In all the cases, within a few hours after the first enema, there was observed a decrease of the temperature

and a great diminution of abdominal pain and tenderness; then the stools rapidly lost their dysenteric character, and after one or two pure diarrhœa stools, soft sausage-shaped and normally colored excrements followed. The author never observed any awkward accessory effects from the treatment. Dr. Schtchegloff tried also the treatment of dysentery by the internal administration of carbolic acid, but its success was only very moderate. The perusal of Dr. Schtchegloff's article induced Dr. Kampf, of Oster, Tchernigov Government, to try (*Russkaia Meditz.*, No. 48, 1884) the plan recommended by the former in eight cases of acute dysentery (three in hospital practice, five in private). Three hospital cases (peasants) were very severe. The treatment was commenced on the fifth, sixteenth, and twelfth days of the disease. The enemata (made of 1 part of the acid to 500 of water) were administered twice or three times daily, at the same time an emulsion of castor oil and resorcin being given. The results were as brilliant as in Schtchegloff's cases. All three patients left the hospital after four days' treatment. Five cases in the author's private practice were all cured after two or three carbolic enemata. Feeling encouraged by his own and Schtchegloff's remarkable success, Dr. Kampf recommends carbolic acid as a specific remedy for dysentery. If carbolic acid be employed in dysentery, the fact of its possessing toxic properties should never be lost sight of. That the drug is not a specific for dysentery, as believed by Kampf, need hardly be mentioned. It is probable that simple injections with warm water are safer than carbolic acid enemata.—*Med. Record.*

Carbolic Acid in Indigestion.

Dr. EDWARD BERDOE thus writes in the *British Med. Jour.* :

I have lately treated several cases of indigestion with carbolic acid, and the results have in each instance been so fortunate that I am anxious to add the results of my experience. I have found it most useful in that form of dyspepsia known as fermentative, accompanied by constant sour rising and eructations of gas, with pain after meals, and discomfort, even after drinking milk or cocoa. My attention was first directed to it by Dr. Fenwick, who gave the glycerine of carbolic acid (1 part of crystallized carbolic acid to 4 parts of glycerine). The dose is from five to ten minims in mint-water, or other convenient vehicle. As it mixes well, I think it a more safe and elegant form than a solution of the acid in water only. When there is much pain of the stomach after food, I have found it useful to add five or six minims of the liquor opii sedativus to each dose; and when there is want of tone in the seat of digestion, and bad appetite, five or ten minims of the tincture of nux vomica will often be found serviceable. I have found these remedies also very valuable in the above combination in cases of pyrosis, where, I think, the sedative influence of the carbolic acid on the mucous membrane is far more useful than the bismuth one usually given in such cases. It is an interesting subject of inquiry whether the carbolic acid acts by arresting fermentative changes in the stomach, or by its well known anæsthetic influence on mucous membranes. I have long given one grain pills of this remedy in cases of vomiting from various causes, and have rarely found it fail to arrest it. In some of these cases there was no fermentative condition of the contents of

the stomach ; some of them were cases of reflex vomiting ; yet all were, with few exceptions, greatly benefited. It would be desirable that the subject should be still further discussed by those who have had experience of the drug.

Icterus Produced in a Few Hours by Nervous Irritation.

What might be called the psychological causation of jaundice has been already discussed in our pages ; hence, the following case, which we note in the *Jour. Am. Med. Ass.*, March 7, 1885, is of interest. We learn that Dr. H. Rendu (*France Médicale Jour. de Med. et de Chir.*) relates the case of a woman twenty-five years of age, who had been treated in his hospital service for puerperal peritonitis. During her convalescence, while her general condition appeared to be good, she was affected with retention of urine. The student who attempted to use the catheter made several ineffectual efforts, but was obliged to desist on account of a sort of nervous crisis which his manipulation produced. Three-quarters of an hour later, when he returned to the ward, he was astonished at seeing his patient manifestly jaundiced (she had a very clear skin previously). As he was about to attempt catheterism again, the patient, still very nervous, urinated spontaneously—the urine being of a deep brown color, and evidently containing biliary pigment. This occurred at 11 : 30 a. m. At 1 p. m., the yellow color was marked not only in the conjunctivæ, but also all over the skin, being most pronounced on the abdomen and trunk, and a little less on the extremities.

On the following day the jaundiced appearance was as decided as during the most intense and prolonged cases of

hepatic colic. The urine looked like brown beer, and gave a green color on the addition of nitric acid. The stools were of the greyish, clayey character, as when deprived of bile. The pulse was normal—no prurigo, no nervous trouble, no hemorrhagic tendency, tongue clear, marked thirst, no want of appetite ; ate but little ; no pain over nor enlargement of liver ; no abnormal sensibility at the epigastrium.

For two days the icterus retained its maximum of intensity. The third day it commenced to decline, and the stools took on a little color, the urine remaining dark. The fourth day gave no trace of the jaundice externally, only the urine was a little dark in color and responded to the nitric acid test. On the fifth day there was no evidence whatever of the recurrence of jaundice.

Hæmamelis in Hemorrhage from the Bowels.

RICHARD HALPIN reports the case of a cabinet-maker, aged 44, who had been subject to bleeding from the rectum for a number of years, since an attack of pleurisy. The hemorrhage occurred periodically, lasting for a month and ceasing for a month. The blood passed in the morning immediately after the bowels were relieved and was usually fluid, bright red, and about two ounces in amount. He was free from piles, fistulæ, etc. He was treated by injecting into the rectum an ounce of the aqueous distillate diluted with a little water and administering a half dram by the mouth every three hours. The bleeding was promptly arrested and during several weeks that the patient was kept under observation there was no recurrence of hemorrhage.—*Brit. Med. Jour.—St. Louis Med. and Surg. Journal.*

CONSTITUTIONAL DISEASES.

Nervous Symptoms of Enteric Fever.

The following are the conclusions reached in an article by Dr. J. C. WILSON, published in *Med. Times* :

1. The so-called typhoid condition (stupor, somnolence, hebetude, prostration) is dependent upon the alteration of the blood caused by the infecting principle. It may be said that the intensity of these symptoms is proportionate to the virulence of the infection.

2. Delirium (especially when violent) and agitation, in a word the ataxic phenomena, are produced by the same pathogenic principle. But their manner of development and their course are to a great degree influenced by the pyrexia. The fact, however, must not be overlooked that certain forms of delirium occurring in enteric fever, are not dependent upon the elevation of the temperature.

3. Certain forms of delirium, especially delirium ceasing after free epistaxis, and certain muscular disorders, such as convulsions and contractures, must be ascribed to hyperæmia. Disturbances of sensation are likewise in many instances the result of congestion of the nervous centres.

4. Vertigo, delirium, etc., may also be due to anæmia, which plays an important part in the production of enfeeblement of the central nervous system. Collapse is very often due to abundant hemorrhages. Inanition, producing, as it does, a profound denutrition, is a cause of anæmia, and favors the collapse and marasmus, which are so often fatal.

In conclusion, whilst intense pyrexia is the cause of serious symptoms and grave complications, it is possible to assign to it too high a position as a pathogenic factor. The dictum of Griesinger

"The fever in great part controls the situation"—*Das Fieber beherrscht zu grossem Theil die Situation*—has exposed those who have accepted it to grave therapeutic errors. The nervous phenomena of enteric fever are produced by various causes which act sometimes together, sometimes separately. It is not easy to discover the predominant element in a pathogeny always complex, nor is it desirable to carry the analysis to an extreme. From a clinical standpoint, however, the subject is important, for the management of the nervous symptoms will be successful in proportion as their interpretation is exact.

Hæmorrhagic Malarial Fever in Alabama.

Dr. JAMES COCHRANE, in an article published in *Jour. Amer. Med. Assoc.*, concludes as follows :

Under this head I propose simply to offer a few suggestions as to some of the more obvious indications of treatment, based on the pathological characters of the disease, and upon the experience of my correspondents.

1. There is virtual unanimity of opinion as to the superabundance of bile, the congestion of the liver, the engorgement of the portal circulation, and the constipation; and there is also virtual unanimity of opinion as to the beneficial influence of purgatives, especially of mercurial purgatives. The methods of administration vary. Some give small doses of calomel, or of calomel in some of the usual combinations of it with other drugs, every few hours, until the bowels are freely moved and the portal and hepatic congestions relieved. Others give larger doses at less frequent intervals; and a few advocate the administration of enormous doses, thirty, forty, and even seventy grains at a time.

2. The disease seems to be always

attended by very distressing nausea, and by copious, frequent, and protracted bilious vomiting. It is of course impossible to arrest nausea and emesis as long as there is bile in the stomach. My correspondents say very little about the management of these symptoms, except as to what is indirectly accomplished through the influence of purgation. The indication, however, seems to be very clear that the stomach should be emptied of all the bile that finds its way into it through the duodenum, or in any other way. It seems hardly necessary to administer emetic medicines; but copious drafts of hot water or warm teas will probably be found useful.

3. A dry, harsh skin is another common symptom, mentioned again and again by my correspondents; and in such cases sweating is mentioned as always giving more or less relief. This may be induced by the external application of heat by any of the usual methods; and will be favored by the ingestion of hot drinks as just mentioned in connection with another indication. Very little mention is made of the use of diaphoretic drugs.

4. It does not seem to be settled whether or not it is desirable to address remedies directly to the kidneys. In the meantime all attempts to check the discharge of the red urine by the agency of astringents and styptics have proved certainly unavailing and perhaps mischievous; and the same unfavorable verdict may be confidently pronounced on all attempts to restore, through the stimulus of diuretics, the action of the congested kidneys when suppression supervenes. The chief reliance for the relief of the overburdened kidneys must be sought in the derivative and compensatory action of the bowels, and especially of the skin.

5. One of my medical friends has found much benefit to result from the free use of oranges and lemons, of which he allows the juice to be ingested *ad libitum*. He is confident that these agreeable vegetable acids exert more effectual control over the stomachic troubles than any other remedies he has ever employed. He also believes that they act well on the kidneys and the skin; and perhaps also on the blood.

6. As this disease has been almost universally regarded as of malarial origin, it was very natural that our physicians should have looked to quinine as the very sheet anchor in the treatment of it, and so for a long time the general rule was to give quinine in liberal and frequent doses; and with many physicians this is the rule still. It was, however, very soon observed that quinine exercised far less control over this disease than over our ordinary intermittent and remittent fevers. It was also observed that it often increased the flow of red urine, and even re-established it after it had ceased to show itself. Strangest of all, it was observed that in many cases the chills came on while the patients were thoroughly under the influence of quinine.

The result of this has been that the confidence of the medical profession of the State in the beneficent power of quinine in this fever has been very much weakened, and that many of them have ceased to use it at all, unless, perhaps, as a tonic in convalescence. Efforts have been made to show the inadvisability of the quinine treatment, by appeals to statistical tables comparing deaths and recoveries with and without quinine. I do not regard these tables as at all conclusive, because of the small number of cases placed in comparison, and for other reasons that

need not now be mentioned. In the meantime the broad fact still remains that in the treatment of this most dangerous of malarial maladies, quinine, the great malarial remedy, has lost ground, and is still losing ground in the confidence of the profession. Those who still believe in the efficacy of quinine in the treatment of this malady ascribe the waning faith of their doubting confreres to improper methods of administration. It should not be given, they say, until the system of the patient has been prepared for its reception—that is to say, until the superabundant bile has been purged away, and the cutaneous functions re-established.

Warm Douching of the Head and Neck in Continued Fevers.

In continued or eruptive fevers, when the patient is sleepless, the temperature high, and pulse rapid and feeble, with jactitation, brown, dry tongue, and sordes on the teeth, nothing will afford such prompt relief, and so quickly induce refreshing sleep, according to the opinion of Dr. A. J. CAMPBELL, in the *British Medical Journal*, as, after wrapping a patient's shoulders in a sheet, and plugging his ears with cotton, to pour a small stream of warm water over his head and neck from an elevation of eighteen inches, for three or four minutes. The head and neck may be supported over a vessel at the side of the bed.

Carbolic Acid Hypodermically in Ague.

Dr. DICULAPY recently communicated to the Société Médicale des Hôpitaux, of Paris, a case of tertian ague, which, failing to yield to quinine, was cured by carbolic acid administered subcutaneously. On the first day the doctor injected 2 r-2 centigrammes of the acid

dissolved in 100 parts of water. The quantity was increased on the following day to five centigrammes, and to seven on the days of apyrexia. Recovery was complete at the end of seventeen days. The patient had then absorbed eighty-four centigrammes of carbolic acid, without exhibiting any toxic symptoms.

Essential Oil of Camphor in Rheumatism.

The *London Med. Press* tells us that this oil, which is now making its way into European practice, is obtained as a by-product in the process for obtaining camphor from the wood of *laurus camphora*, and has for centuries enjoyed the highest reputation among the Chinese and Japanese as a remedy in muscular and articular rheumatism. In the process of distilling the camphor wood, the oil and camphor are carried over together into a receiving trough and separated by draining.

The oil has been examined by R. H. Oishi, and the results of his investigation show that it consists of a saturated solution of camphor in a complex mixture of terpenes of the hydro carbon series and oxyhydrocarbons isomeric, with camphor and other aromatic bodies. Upon submitting the oil to fractional distillation, that portion obtained between 180° to 185° C., was found to give figures coinciding with the formula $C_{15}H_{16}O$, and another fraction between 178° – 180° C., after three distillations, upon combustion, gave figures equivalent to $C_{12}H_{20}$.

In addition to combining the properties of turpentine and camphor, it possesses the advantage of being far more cleanly than the fatty solutions of camphor which have hitherto been in vogue in this country, while its low price places it within easy reach for experimental purposes. The oil is very mobile, of a

dark brown color, and has a strong, but pleasant odor, between that of sassafras and camphor.—*Med. and Surg. Reporter.*

Salicylate of Potassium in Acute Rheumatism.

Dr. E. L. MILLER, in the *Therapeutic Gazette*, says that he has been using salicylate of potassium in cases of acute articular rheumatism with much satisfaction. In cases where the salicylate of sodium caused intense nausea and vomiting, the potassium salicylate was substituted, with a disappearance of the gastric irritation and a marvelous improvement in the condition of the patient. In one case, after twenty-four hours' use of the potassium salts, the joint pain ceased, and the temperature fell from 104.2° to 99.6°. He also says that it is of benefit in the fermentative diseases of the stomach. The formula he recommends is as follows: *R.* Acidi salicylatis, potassi bicarb, $\overline{\text{aa}}$ 3 v.; aquæ, $\overline{\text{z}}$ ij. Solve et add: Tinct. nucis vomicæ, 3 ij; spr. lav. co., 3 ij; syr. simplicis q. s. ad, $\overline{\text{z}}$ iv. *M.* Sig.: A teaspoonful every three hours, well diluted.—*Louisville Med. News.*

Palatable Prescribing.

Cough mixtures can be to a certain extent rendered palatable by a selection of proper vehicles. The citrate of potassium can be largely masked by the free use of lemon juice. Muriate of ammonia is largely covered by liquorice, provided the latter be added in such quantity that there will be ten to fifteen grains of it for every ten grains of the muriate. The addition of glycerine to a mixture containing an ammoniacal or other irritant salt, often has the most happy effect on obtunding the acidity. It must not be forgotten, however, that glycerine throws out of solution most alkaloidal salts. This is essentially im-

portant in connection with the fact that the addition of glycerine to the tincture of the chloride of iron is the most advantageous from the æsthetic point of view. We are very apt to combine tincture of chloride of iron with salts of quinine, strychnine, or other alkaloids. Even when such solution is very strongly acid, glycerine precipitates the organic principle. Syrup of squills, syrup of ipecac, and most other sweet expectorants, can readily be masked by the syrup of wild cherry bark, provided cyanide of potassium (at least 1-20th of a grain to a dose) be added to intensify the prussic acid taste. The excessive sweetness of these mixtures is disagreeable to some individuals; this, of course, can readily be obviated by the addition of lemon juice or other acid. There are certain very valuable remedies whose nauseousness in solution cannot be overcome by any combination. Under these circumstances the endeavor of the practitioner should be to give a dose so small and in such form that it can be enveloped in a mechanical coating of some sort. Whenever the material is a solid, this is readily managed by giving it in the form of a silver gelatin, or sugar coated pill; for, whatever may be said in regard to the solubility of these preparations, they are dissolved in the stomach with sufficient rapidity for all practical purposes, provided the pharmacist has done his work properly and the pills are at all fresh. It seems to be a tradition of the profession that all cough remedies should be given in liquid form. We hear continually of cough mixtures, but who ever heard of a cough pill? Now, there is little reason in this. Squill, ipecacuanha, tartar emetic, all the ordinary expectorants, except ammoniacal salts, can be given in a coated pill as well as in a nauseous mixture. When the drug is of such charac-

ter that it cannot be readily given in pill unless the dose be very large, it is readily administered in capsules. Oil of eucalyptus should never be given, except in capsules. Oil of copaiba has for decades been habitually given in capsules for other than pulmonary purposes; why not also for chronic bronchitis? The ammoniacal salts can be given in capsules as well as in mixture. It may be objected by some, that their local irritant effects would be increased by such method of administration. This does not seem to be a valid objection; but if it is considered so, let the patient drink a half a tumbler of milk directly after ingesting the supposed irritant remedy, and the stomach will be protected much more effectually than if the nauseous drug were given in a teaspoonful of water.—*Therapeutic Gazette.*

Trypsin as a Solvent of Diphtheritic Pseudo Membrane.

Dr. H. D. CHAPIN concludes an article published in *Med. Record*, Mar. 7, 1885, as follows: Professor Kuhne gives the following method of preparing pancreas for a trypsin solution: "Take fresh or one day old pancreas from the ox; hash it fine and add four to five volumes of absolute alcohol; let stand five to six days, then drain off alcohol, and add fresh absolute alcohol, two volumes; let this stand three days; drain again and extract the substance with ether; the pancreas can then be quickly dried in air. To five grammes of pancreas, so prepared, add 50 c. c. of 0.1 per cent. salicylic acid solution; let digest in a water-bath four hours at temperature 37° to 38° C.; filter, and to filtrate add sodæ bicarb., to make slightly alkaline, say about 0.25 per cent. The fluid is then ready for use. It is best to add one per cent. thymol to the solution to prevent putrefaction.

This addition of thymol in no way interferes with the action of the fluid." Dr. Van Syckel has prepared a trypsin solution by adding five grammes of the prepared extractum pancreatis to 50 c. c. of the salicylic acid solution, etc., as above. He states that a trypsin solution, prepared correctly, should dissolve its weight of fresh blood fibrin in ten minutes, and that all preparations requiring a longer time are poor. The trypsin solutions I used were made for me by Mr. Fairchild, and represented by assay the strength of about gr. iv. to 3 j. To avoid decomposition, various antiseptics were added; to some of the solutions one-tenth of one per cent. of salicylic acid with a little thymol, and to others a three per cent. solution of boric acid and borax, combined to form a neutral medium. We are now experimenting on this subject, and hope soon to determine the best antiseptic to use, that will preserve the ferment without inhibiting its action, and possibly be valuable in disinfecting the diphtheritic surface as well. Of course, any antiseptic must be used in extremely small quantities to avoid interfering with the activity of the ferment. I have tried the trypsin solution in a number of cases of diphtheria, in which the membrane was abundant upon the tonsils and fauces, with favorable results. It should be applied at short intervals by the spray or brush; in the few cases in which I have thus tried it, the membrane has disappeared more quickly than is usual in my experience. As the ferment is locally unirritating, it can be very frequently applied as long as the membrane continues to form. A few drops of the solution placed in a dog's eye showed no signs of irritating. Upon living tissues, the power of the ferment does not seem to be very great. All the physical conditions in the fauces,

pharynx and larynx are favorable to its action.

The important question, as to whether a trypsin solution can practically be utilized to dissolve false membrane within the larynx and upon the vocal cords, remains to be solved. If the membrane can be disintegrated as quickly as it forms, the necessity of tracheotomy may sometimes be avoided. To this end it is of paramount importance to thoroughly apply the ferment within the larynx. It has always been a matter of uncertainty to me how much of the spray, as usually applied to young children, actually reaches the glottis. In cases in which the steam atomizer is used, it is rarely possible to get the child near enough to inhale the spray, which is usually fine, in very great concentration. When the nozzle of the hand-spray is placed in the mouth, they at once gag, the back of the tongue rises, and prevents the entrance of the medicated spray; for when the tip of the nozzle is touched, the spray stops at once. To avoid this trouble, I have had made by Tiemann an instrument with a rounded nozzle that can be thrust into the mouth of a struggling child without fear of doing any harm, and a projecting depressor that reaches forward very nearly to the tip; this at the same time holds down the back of the tongue and prevents the stopping of the spray from the contact of the soft parts. By means of a double bulb, or possibly at times by compressed air, a continuous downward spray is maintained.

It is thus aimed to fill the pharynx and larynx with a trypsin spray of sufficient tension to penetrate all parts. I have only been able thus far to try the trypsin in one case of diphtheritic croup, and that with negative results, as the baby, nine months old, was moribund

when I saw her. If in any instance, after tracheotomy, we are able to keep the air passages below the tube tolerably free from membrane, by this agent, it will be a great gain.

The extract of pancreas, while exerting a digestive effect upon diphtheritic membrane, does not act quite so quickly as trypsin, in the cases in which I have compared the action of the two, upon fibrous membrane. In the case cited at the beginning of this paper, however, the extract certainly had a timely and favorable action. Professor J. Lewis Smith has used the extract of pancreas upon quite a number of cases of diphtheria, and considers its action promising. With reference to the manner of applying it, I have had Mr. Fairchild make me up quite a number of solutions, and as a tentative formula, it has seemed to me the following is as good as any:

℞. Ext. pancreatis, gr. xv.; sodii bicarb, gr. iij.; glycerinæ, 3 j.; aq. dest., 3 vij.

It can be used by spray or brush. Stronger solutions do not appear to act any quicker, while being more viscid. Enough soda is added to make the solution alkaline, and the glycerine to enable it to catch hold of the membrane readily. As stated at the beginning of this paper, before any definite conclusions in therapeutics can be reached, many observations by different observers are necessary. It certainly seems as if efforts to reduce the mortality of diphtheria are continually needed. A disease that kills more than cholera cannot have trials made in too many directions to partially control it.

Gargle in Diphtheria.

℞. Tr. ferri chl.; glycerine, āā ʒ ss.; kali chl., ʒj.; spts. ether nit., 3 ij.; ol. gaultheria, ʒ xx.; aquæ ad., ʒ ij. M. Sig. Use in equal parts of water as gargle.

Diphtheria and Croup.

Dr. J. A. MILLER concludes an article in *St. Louis Med. Jour.* on differential diagnosis as follows :

In Diphtheria.—The local inflammation begins in the pharynx.

Age affords no immunity ; it attacks the old as well as the young.

The wind is blowing on this continent, from the south, south-east or south-west.

The exudation or membrane may form on the larynx, pharynx or in the œsophagus or any mucous surface.

The malignancy of the attack depends on the constitutional virus.

The fatality depends on the destruction of red blood corpuscles.

The prognosis may be based on the organs on which the membrane forms. The pharynx being less dangerous than the larynx, and the larynx less so than the œsophagus.

In Croup.—It begins in the trachea but may spread to other organs.

The attack is confined almost exclusively to children under ten years old.

It blows from the north, north-east or north-west.

The false membrane forms in and around the trachea.

It depends on the extent of the exposure.

On exclusion of air from the lungs.

The prognosis is based on the extent of the occlusion of the trachea.

The Excretion of the Salts of Lead.

Professor DUMOULIN lately presented to the Academy of Medicine of Brussels, according to the *Revue Medicale*, demonstrations of the excretion of the salts of lead by the integument. The plan that he adopted for demonstration consisted in tracing on the different parts of the body, with a five per cent. solution of the monosulphide of sodium or ammonium. The presence of the salt of lead was, of course, determined by the precipitate of the sulphide of lead, which developed its characteristic black mark. It is needless to say that the possibility of the reaction being due to a deposit of lead from the atmospheric dust was excluded. Washing the body in cold or hot water did not remove the salt of lead, and hence the professor concludes that the deposit consists of a salt insoluble in water. When, however, he

used a solution of the tartrate of ammonium, the salt of lead was washed off, and the resulting water gave the reaction for lead, whilst the tracings on the body failed until the expiration of several days to develop the black mark of the sulphide of lead. The question promises to be of considerable importance in a therapeutic sense, as under the circumstances, baths of a solution of tartrate of ammonium would be indicated. The strength of the solution of the tartrate of ammonium is not given.

The conclusions which the professor presents, are as follows :

1. The fourteen patients affected with lead poisoning, which I have examined, have all exhibited the presence of lead in the integument in sufficient quantity to give the characteristic reaction with the monosulphide of sodium.

2. In recent cases the reaction is much more marked than in chronic cases.

3. Washing with cold water removes only the lead salt entangled in the epidermis, which is rubbed off; the water, when filtered, gives no reaction for lead.

4. Washing with warm water gives no different result.

5. Prolonged washing with a solution of tartrate of ammonium removes from the skin the property of turning black on the application of sulphide of ammonium.

6. The solution of the tartrate of ammonium used for the washing contains in solution the salt of lead, which was insoluble in simple water.

7. The lead is precipitated from the solution by the sulphide of ammonium or the monosulphide of sodium as a sulphide of lead.

8. The surface washed no longer gives any reaction with the sulphide of sodium, consequently the whole of the lead salt is removed from the external surface of the integument.

9. The reaction with the sulphide of sodium is again developed after a few days.

10. The gradual increase of the lead salt on the external part of the skin, is shown by the gradual increased action of the reagent.

11. The lead salt is deposited in the integument by means of the cutaneous excretion, but how an insoluble salt is thus deposited does not yet appear clear. — *Weekly Med. Review.*

Phosphorous Necrosis of the Jaws.

Dr. I. EWING MEARS, in an elaborate paper read before the American Medical Association, arrived at the following conclusions:

1. That phosphorous necrosis of the jaws is a local expression of the constitutional condition produced by the in-

halation of the vapor of phosphorus and by particles of the agent taken into the system with the food by operatives in match factories, who do not give proper attention to cleanliness of the hands.

2. That the introduction of the agent into the system is, as a rule, very gradual, and in such small quantities as to avoid the production of symptoms of acute poisoning. That in this way the chronic toxic condition of the system is induced, characterized chiefly by disintegration of the red blood corpuscles and fatty degeneration of the arterial coats.

3. That the toxic condition precedes the development is shown by the fact that the disease does not attack operatives recently exposed to the action of the agent, but those who have been exposed for a period of years.

4. That examinations of teeth of operatives have shown that many who have a condition of caries, and that many who have returned to work immediately after the extraction of teeth, have enjoyed immunity from the disease, showing that the agent has not attacked the periosteal tissue thus exposed. (In one case, the disease did not appear until three months after labor in the factory had ceased.)

5. That individuals vary in their susceptibility to the action of the poison; for this reason many suffer immediately with symptoms of acute toxic conditions, such as nausea, vomiting, etc., and are compelled to abandon work in the factories.

6. That the conditions under which experiments have been made on animals to prove the absence of the disease until exposure of the periosteum and perialveolar tissue was affected, were not similar to those to which operatives in match factories are subjected.

7. That treatment of the disease in the primary stage in the manner outlined is efficient and prevents its progress.

8. That the antidotal powers of turpentine have been established, both in neutralizing the effects of the poison upon operatives during their work, and also in the treatment of the early stage of the disease.

9. That the disease is to be prevented among operatives by the adoption of thorough methods of ventilation, stringent rules with regard to cleanliness, and the free disengagement of the vapor of turpentine in all the apartments of factories in which the fumes of phosphorus escape.

DISEASES OF THE URINARY ORGANS.

The Cause of Increased Secretion of Urine with Contracted Kidney.

Hypertrophy of the heart, which may be found accompanying the contracted kidney has been naturally explained by the supposition that increased cardiac energy is required to force the blood in sufficient volume through the diminished renal circulation. Prof. ROSSBACH, of Jena, (*Berlin. Klin. Wochenschrift*, No. 3, 1885) thinks the phenomenon of hypertrophy does not admit of this simple explanation, since in a series of experiments with the use of nitro-glycerine, which notably diminished the blood pressure, he found that not only no disadvantage resulted in chronic nephritis (stage of contracted kidney), but positive benefit. Even when the remedy is given hourly, not only is the amount of urine increased, but also there is a marked improvement of the general condition, and of a series of severe symptoms on the part of the eye and chest—retinitis, asthma. Nitro-glycerine causes temporary headache, but the

system becomes accustomed to the drug in the course of a few days.

From these observations the Professor concludes that the augmented urinary secretion in case of contracted kidney depends upon other causes than the high blood pressure; possibly it is due to more rapid transudation in the renal capillaries. Also, the high blood pressure probably is in part responsible for the severe symptoms of contracted kidney, retinitis, asthma, etc. Finally, nitro-glycerine is an excellent drug in such cases, as it prolongs life and relieves distressing symptoms.—*Courier of Med.*

Buckwheat Flour in Diabetes.

Dr. A. M. DUNCAN, of Hamler, Ohio, writes that Dr. Alvord, a retired practitioner of that place, who is a sufferer from glycosuria, finds more relief from a diet of pure buckwheat flour cakes than from anything else. While he adheres to this food the urine becomes nearly normal in quantity and quality, there is no gastric distress, and the pain in the eyes—nearly destroyed by chronic iritis—is markedly relieved. On resuming the use of wheat bread and other starchy foods, the symptoms become aggravated, to be again relieved upon a return to buckwheat.—*Medical Record.*

Caffeine in Bright's Disease.

The medicinal treatment of this disease is so unsatisfactory that we oftentimes feel inclined to grasp at straws; and while caffeine may be only like grasping a straw to save a drowning patient, yet we deem it well to report what Dr. ALFRED S. GUBB says in the *Lancet*, February 28, 1885:

"I have had a case of sub-acute Bright's disease (following presumably on an acute attack) under my care for some two months, with scanty, highly albuminous urine, and gradually in-

creasing ascites and œdema of the lower part of the body and lower limbs. The only treatment which had benefitted the patient in the least was the milk diet; but, in spite of a temporary improvement on this account, symptoms of approaching uræmia, and the inefficacy of any medicinal treatment, or hot-air baths, etc., rendered the case an anxious one. I then tried caffeine in the two forms supplied by Messrs. Burroughs, Wellcome & Co. for use at this hospital. First, the effervescent citrate of caffeine, an elegant and agreeable preparation, but which only contains a grain to a drachm, and is therefore hardly as convenient as the Wyeth's tablets, each of which contains a grain; being readily soluble, they constitute a very convenient method of administration. The result of three or four days' treatment at the rate of fifteen grains a day, in three doses, was to increase the flow of urine from half a pint to between three and four pints of clear urine, though still slightly albuminous. The epigastric and lumbar pains disappeared, together with the cerebral and visual troubles, and the condition of the patient has uninterruptedly improved ever since, and she has left the hospital quite convalescent."

Cystitis.

We have found the following very valuable in chronic cystitis, used locally as an injection into the bladder: *R. Ex. Hydrastis Can. fl. 3 ii.; Sodæ Bicar. 3 i.; Glycerine 3 ii.; aq. ad. O. i.*

DIGESTIVE TRACT.

The Treatment of Dropsy by Concentrated Solution of Cathartics.

Dr. MATTHEW HAY, whose name is well known to us as the author of an extensive monograph on the action of the saline cathartics, proved that if the

salt be given in a concentrated solution when the alimentary canal contains little or no fluid, it produces an immediate and very decided concentration of the blood, owing to the blood becoming deprived of a large amount of water through the intestinal secretion which the salt excites. He found, however, that this concentration of blood did not occur if the salt is administered in dilute solution, or if the alimentary canal contains much fluid at the time of administration. This observation led Dr. Hay to the employment of a saline cathartic in a case of ascites from organic heart lesion, six drachms of sulphate of magnesia being given in two tablespoonfuls of water, the patient being kept without food or liquid for at least twelve hours before the dose, and no water given afterwards. The result was that in twenty-four hours the anasarca was greatly diminished and the dyspnoea entirely disappeared, the purgative action of the salt commencing in less than an hour after its administration, and causing several evacuations in the next few hours. In a few days the dropsy had disappeared, and there was no return during the month of observation. Dr. Hay added that he found this treatment more useful in general than in local dropsy; and of general dropsies, most beneficial in those dependent on the stasis of the circulation, such as in cardiac dropsy. The successful result of this case induced Dr. WILLIAM G. EGGLESTON (*Journ. Amer. Med. Association*, March 28, 1885) to employ the same treatment in a case of pleuritic effusion which occupied the entire left pleural cavity, displacing the heart to the right side of the sternum, and causing flatness on percussion over the whole of the left side up to the clavicle. The patient refusing to submit to the operation of tapping, he was

ordered to abstain from water and liquid food as much as possible, and to take next morning sulphate of magnesia, 3 vi, in less than half a glass of water.

When the patient was seen two days afterwards, there was a marked decrease in the amount of effusion. The level of the fluid was between three and four inches below the clavicle, the dyspnœa had decreased, and, with the exception of weakness, the patient felt better. The salt had operated first in about three-quarters of an hour, and during the day there had been eight other large watery evacuations. As the patient said, the water had literally poured from him. Another dose of the salt, 3 iv, was ordered to be taken the next morning, August 11. When seen on the 12th, the fluid was still further diminished, and fl. ext. jaborandi, ℥ xx, administered, which produced a copious perspiration. On the 15th of August the fluid had almost entirely disappeared from the chest, the lung had resumed its functions, and there was no dyspnœa. When last seen, February, 1883, there had been no return of the fluid.

Dr. Hay remarked that the alteration of the volume of the blood takes place apparently without any change in the blood-pressure, and the blood would, therefore, appear to abstract the tissue-fluid in virtue solely of its concentrated condition; also that the "presence of the salt in the blood may also influence the tissue-fluids by acting on them endosmotically." It would seem, however, that the presence of the salt in the blood could scarcely be reckoned as a factor in this action. The concentrated condition of the blood would be sufficient for an osmotic action into the vessels from the tissues, and seeing that the fluid in the intestines is so much more saline than the blood, exosmosis would not be likely to occur even to a

limited extent, sulphate of magnesia being of such low diffusive power that it does not readily find its way from the intestinal canal into the blood.

The fact noted by Dr. Hay, that the concentrated saline cathartic removes the fluid both by the intestines and kidneys, was also noticed in the case of Dr. Eggleston's patient. While sulphate of magnesia produces such an abundant intestinal secretion, there is but little intestinal irritation and systemic disturbance, and its great solubility is a point in its favor, as it is not necessary to take the large amount of water which would be required to dissolve some of the other salines, such as sulphate of soda. This rapid removal of fluid by two channels is an important consideration in critical cases of dropsy, and is worthy of a further trial.—*Therap. Gazette.*

Postural Method of Treating Dilatation of the Stomach.

Dr. TYTLER writes to the *British Medical Journal*: A recent case, in which I had recourse to the above method of treatment, may perhaps be of interest. The patient had for some months suffered from debility and lowness of spirit, with loss of appetite, uneasy sensations in the epigastrium, and occasionally obscure pains in various joints. Prior to this, she had been in robust health, with excessive appetite, and used to amuse her friends by exciting splashing sounds in her stomach. When she came under notice, she vomited, every second or third day, semi-fluid brown yeasty matter. By applying a hand to either side of the abdomen, succussion sounds could be easily elicited. After trying various remedies, such as rhubarb and soda, etc., with only temporary benefit, I suggested washing out the stomach with a siphon tube. As both the patient

and her relations were not agreeable to this, I resolved to try the effect of posture in relieving the stomach. I made the patient lie on her back on the sofa for two hours after every meal, with a small pillow placed below her buttocks, and restricted the diet to fluids (milk and beef tea). The effect of the first application of this posture was to cause vomiting almost immediately. However, I insisted on pursuing the treatment; and the vomiting soon ceased, and she began to feel better and less uncomfortable about the epigastrium. A tonic of iron and strychnine was given three times a day. After a little while, she was persuaded to go out, after applying a tight binder to the stomach, but still to keep on for some hours the postural treatment after eating. In the course of a few months, the patient had regained her old energy and spirits, but was advised to be still careful with her diet, especially as to quantity.

The rationale of this procedure is obvious. Owing to the relaxed and flabby condition of the walls of the over-distended stomach, the food comes to hang below the level of the pylorus in the flaccid sac, incapable of emptying itself in the ordinary postures of the body. By elevating the lower end of the abdomen, the contents of the stomach are brought on a level with the pylorus, and thus put in a position to pass on in the natural way.—*Weekly Med. Review*.

A New Method of Treating Acute Intestinal Obstruction.

Dr. KUSSMAUL, in the *Lancet*, of February 14th, advances the view that free washing out of the stomach might prove efficacious, and already cases of marked success following the measure have been published. In one case, after eight days complete obstruction,

and in the other, after nine days, the symptom of fæcal vomiting being present in each, the washing out of the stomach, and consequent evacuation of large quantities of fluid fæcal matter from the upper part of the small intestine, resulted in complete relief from symptoms. The measure may be compared to the effect produced by laparotomy above the site of an obstruction; and the good result is explained on the ground that evacuation of the distended bowel affords an opportunity for a spontaneous reduction of a herniated or twisted loop. The relief from the inordinate abdominal distension is very great, and, moreover, the evacuation favors palpation for the purpose of diagnosis. Obviously not every case of acute intestinal obstruction could possibly be relieved by this method, but the simplicity of the practice, the certainty of affording temporary relief, and the possibility of a cure, are reasons for its sedulous adoption prior to proceeding to more serious measures.

Intravenous Injections in Cholera.

Dr. HAYEM, the well known French medical writer, has published his experience during the late cholera epidemic in France in the *Bull. de l'Académie de Médecine*, 1885, 17. He was attached during this period to the St. Antoine Hospital, and he is greatly in favor of intravenous injections. Of about 100 cases of Asiatic cholera, he is positive to have saved the lives of 20 by this method. The solution which he usually employed was the following: Distilled water 1 litre, chloride of sodium 80 grains, sulphate of sodium 160 grains. This solution was first filtered, and then heated in the water bath up to 38° C. The quantity mentioned was used in children; in adults

double the amount was injected within from 12 to 15 minutes by the aid of a transfusion pump.

It may be that there is some virtue in this method of treating cases of Asiatic cholera during the stage of collapse; but considering that the last epidemic in Paris, during which Hayem gained his experience, was by no means a very fatal one, the results obtained by him—saving 20 per cent.—were no extraordinarily favorable, especially as he does not say that the 100 cases had been of grave nature.—*Med. and Surg. Rep.*

Tannic Acid Injections in Cholera.

In view of the fact that a visitation of cholera is expected by many this summer, it is well that we should refresh our memories on all recommended methods of treatment. Hence we reproduce the following from the *Lancet*.

During the recent exceptionally severe epidemic of cholera in Naples, PROFESSOR CANTANI proposed combatting the premonitory diarrhœa by warm tannic acid enemata. The practice was largely and successfully adopted. Dr. Vincenzo Vitone has just published, in *Il Morgagni* for last month, his results with that method of treatment at the Cholera Orphanage at S. Antonio a Tarsia. The children admitted in this institution came from the most infected parts of the city, and had lost one or both parents from cholera. Three illustrative cases may be quoted from a large number in which cholera was promptly arrested by tannic acid clysters. S. B., aged eight, was conveyed to the Orphanage on September 18, from the house in which both his parents had died from cholera. He had enjoyed perfect health up to the time when, from no appreciable cause, he was seized with vomiting and diarrhœa.

In a few hours he had ten evacuations, the last perfectly colorless. The patient complained of intense thirst and pain over the region of the stomach; the face was slightly cyanotic; temperature 36° C.; pulse scarcely perceptible. The following solution was injected per rectum: Warm water, 1000 grammes (1 gramme is equal to 15.432 grains); tannic acid, 3 grammes; gum arabic, 20 grammes; and laudanum, 12 drops. An infusion of chamomile was at the same time administered. After the lapse of an hour the boy was more wakeful, and the pulse became perceptible; the alvine discharges ceased, and in two days the patient left his bed completely cured. P. T., aged four years, had lost her mother from cholera, and was conveyed to the Orphanage on October 10. She was rapidly reduced by rice colored stools, so as to be scarcely recognizable. At 3 p. m. the temperature was 36.1° C., and the pulse almost imperceptible. The following clyster was administered: Warm water, 400 grammes; tannic acid, 2 grammes; gum arabic, 15 grammes; laudanum, 5 drops. The diarrhœa was suddenly arrested. At midnight the child was wakeful, hungry, and partook of milk. In two days she left her bed perfectly cured. A. R., aged three, lost his mother from cholera, and was suddenly seized with vomiting and diarrhœa. The face became cyanotic, and the extremities cold. The temperature of the body was 35.1° C.; the pulse was scarcely perceptible. A warm tannic acid clyster, according to the formula in the preceding case, was administered at once, an infusion of chamomile was given by the mouth, and the limbs were wrapped in warm woolen cloths. In the course of two hours the diarrhœa had ceased, and marked reaction set in; the temperature was 38.8° C., and the pulse 80. The following day the fever

continued, and the bowels acted, but the motion was well formed. The fever continued two days longer, but then subsided, leaving the child perfectly well. In adults, Dr. E. Villani has injected per rectum as much as fifteen grammes of tannic acid in two litres of warm water, with invariably good result. The *modus operandi* of the treatment is attributed by Professor Cantani to the astringent power of tannic acid, and to its sterilizing the comma bacilli, which need an alkaline solution for their development. Without entering into this therapeutical disquisition, the clinical results appear to afford striking evidence of the efficacy of warm tannic acid clysters in the treatment of cholera.—*Med. and Surg. Reporter*.

The Varieties of Gastric Disease.

Riegel believes that the stomach must always be washed out in accordance with Leube's plan before an accurate diagnosis can be made. A healthy stomach has perfectly finished the digestion of an ordinary meal in seven hours, and Riegel confirms this. But conversely, the fact that the stomach is empty after such period does not necessarily prove the absence of disease, as both in gastric ulcer and in Leube's "nervous dyspepsia," digestion is not delayed. In most gastric diseases, however, there is delay, and the next question is—its cause. To this end, the gastric juice must be examined. Riegel rejects Leube's method of cold water injection, and endeavored to procure the contents of the stomach as undiluted as possible; these he afterward examined for acids and pepsine. The best re-agent for free hydrochloric acid was found to be methyl-anilin-violet, and for the separation of lactic and butyric acids from the former, Uffelman's test of carbolate and chloride of iron (*Ar-*

chiv fur Klin. Med.). The amount of pepsine was estimated from the time required for the complete digestion of a very small quantity of albumen. As a result, cases of gastric diseases are divided into three groups. 1. Cases characterized by the absence of free hydrochloric acid, and the presence of lactic and butyric acids; pepsine being almost or entirely absent. This condition was found mainly in cancer, and in dilatation from cancerous constriction of the pylorus. The hydrochloric acid is regarded as normally secreted, but it is destroyed by the cancer, according to Professor Riegel. 2. Cases presenting a sour fermenting liquid, containing much lactic and butyric acid, also free hydrochloric acid; the digestion test indicating a fairly normal amount of pepsine. To this category belong the cases of gastric disorder from fermentation, well described by Naunyn. Methodical washing out is of the greatest value in these cases. 3. Cases in which the digestion is considerably prolonged; hydrochloric acid is abundantly present, organic acids are absent or nearly so, and the digesting power of the gastric juice is normal. It is shown that the further addition of hydrochloric acid does not quicken, but rather hinders digestion. An excess of organic acids, with excess of hydrochloric acid, hinders digestion, and acid fermentation is induced. Practically speaking, hydrochloric acid should only be given when there is a deficiency of acid in the gastric contents during digestion, as shown on examination.—*Archiv fur Klinische Medizin*.—*Med. Record*.

Lusk's Aperient Pills.

℞. Ext. aloes socot., ℥ j. ; pulv. rhei, grs. x ; ext. nuc. vom., grs. v ; ext. tarax., 3 ss. M. Fiant pil. No. xx. Sig.—One before meals.—*Med. Bulletin*.

DISEASES OF RESPIRATORY ORGANS.

Inhalation of Pure Air.

A patient of Dr. V. LIEBIG had been suffering for years from a bronchitis complicated by bronchiectasis. He had a great deal of purulent and often bloody expectoration. Notwithstanding the most careful treatment by excellent physicians, his disease gradually became so aggravated that the patient, the moment his skin received the slightest chilling by his presence in a cooler atmosphere, felt a great increase of all his morbid symptoms. Finally he conceived the idea, continually by day and night, to inhale pure air. As the result of this treatment, continued for eight months, the patient gained sixteen pounds in weight, was able once more to resume his usual occupation, and lost most of his cough, and with it all expectoration. A sudden change from a warmer to a cooler atmosphere was no longer attended by an exacerbation of the symptoms.

The *Aerztl. Trit. Bl.*, 1885, No. 4, where the case is reported, describes the apparatus used by the patient. This consists of a hollow tube, about three inches wide, and made of parchment paper, folded vertically in such a manner as the movable leather of a harmonium, thus permitting extension. The length of the tube is *ad libitum*. Its lower end, which is brought in contact with the outer air, has a cylinder attached of a width of ten inches and a height of six. This cylinder, for the purpose of purifying the air, is filled with cotton wadding. The mouth piece of the tube is provided with a valve, so arranged (as in the apparatus for inhaling nitrous oxide) that the patient can inhale only the pure air, while the air which he exhales finds its way out through the

valve. The apparatus is well worth an extended trial, and is especially useful to those who cannot go to the country or seashore and there obtain a purer air.

The Treatment of Whooping Cough.

In his summary of treatment, in a clinical lecture delivered at the Philadelphia Hospital (*Medical News*), Dr. JOHN M. KEATING emphasizes the value of the steam spray and the atomization of medicated solutions, among which he ascribes value to Dobell's solution, eucalyptol, and thymol. With the bichloride he advises caution. Corrosive sublimate, which is now used for almost everything, he says, has also been applied here in the form of the spray. He remarks that it is a dangerous drug to put into the hands of an inexperienced person, and, as we have so many other useful remedies for this affection, he thinks it wise to avoid the use of corrosive sublimate. He has used listerine extensively with good results in the treatment of whooping cough. He employs it in the strength of one drachm to two ounces of water, with an ordinary hand-atomizer, directs the nurse to apply it twelve or more times a day, and finds that little children, even babies, do not object to it. He adds to it tincture of belladonna, potassium carbonate, or ammonium bromide, as the case may demand. Chloride of ammonium he also finds of great service in the form of spray.—*New York Medical Journal*.

DISEASES OF CIRCULATORY ORGANS

Valvular Friction Sounds.

Dr. ANDREW H. SMITH, of New York, in an article on this subject, says: Any practitioner who is in the habit of studying carefully the sounds of the

heart, must observe cases in which the closure of either the mitral or the aortic valve gives rise to a sound which is not strictly a murmur, but which is also not the typical normal sound. The heart-sound, first or second, as the case may be, is slightly lengthened, and its quality undergoes a change. The first part of the sound has the normal character, while the second, which is of the briefest duration, suggests the idea of something added. This is sometimes expressed by saying that the sound is *impure*. It was formerly, and probably still is, usually attributed to slight leakage. But the addition to the normal sound differs from a regurgitant murmur in its quality, in its shorter duration and in the abruptness of its beginning and ending. Moreover, it is often met with in cases in which there is no other sign or symptom which could be referred to valvular lesion, and in which the history presents none of the recognized antecedents of cardiac disease. Of late the diagnostic value of these impure sounds has been called in question by different authorities, but no definite explanation of their production has been given.

A careful study has led me to the conviction that they are due to a readjustment of the curtains or cusps to each other after their first contact. In the case of the mitral valve, for instance, the commencement of systole throws the curtains together; but, as the systole gains in force, and the pressure of the blood becomes greater, a difference in the relative tension of the curtains would cause a slipping of one upon the other, and the production of a friction sound which, from the slightness of the motion, would be brief and abrupt. Such an inequality in the tension of the curtains would result from a difference in their area, or in the

length of the tendinous cords, or in the action of the papillary muscles. In the case of the aortic valve, a slight thickening of one of the cusps would occasion a similar adjustment.

I have observed this sound at the apex most frequently in those cases in which there is an accentuated second sound at the base; or, in other words, when there is increased arterial tension. This may be explained by the greater intraventricular pressure and thus consequently increased tension of the valve curtains. In fact, I think it will be found that in a very considerable proportion of cases of contracted kidney, with increased arterial tension, the apex first sound is not pure, even though signs of decided cardiac implication may not be present.

Cases in which there is opportunity for verifying by post-mortem examination the views which I have expressed, are in the nature of things rare. Still, I can recall two cases occurring some years ago, in which slight regurgitation was confidently diagnosed by myself and others, but in which, at the autopsy, the valve was found competent by the hydrostatic test. I now believe that in these cases a valvular friction sound was mistaken for a regurgitant murmur.

This matter is important not only as a question of nice diagnosis, but as affecting prognosis and treatment. For, if we accept a given sound as possibly indicating the beginning of valvular insufficiency, we are naturally in doubt whether the insufficiency may not increase, and in the course of time the symptoms of valvular disease be developed. But if we regard the sound as produced by friction between the valve-curtains or valve-cusps, we can more confidently give a favorable prognosis, and the restraints usually imposed upon patients with valvular insufficiency will not be considered necessary.—*Medical Record*.

CONSTITUTIONAL DISEASES.

Antipyrin in Sunstroke.

Dr. BENJ. F. WESTBROOK of Brooklyn, reports two cases in the *N. Y. Med. Jour.* of the apoplectic form of sunstroke in the treatment of which antipyrin was used hypodermically, for its antipyretic effect. The first had a rectal temperature of 109° F., was comatose and had tetanic convulsions. One drachm of a 50 per cent. solution was injected beneath the skin, and the dose repeated in three quarters of an hour. When the second dose was administered, the temperature was 107.50° F., though no cold applications had been used, except to the head. Half an hour after the second dose, cold having also been applied to the surface, the rectal temperature was 99° F.

The coma continued and the most violent opisthotonic convulsions occurred, but, after cubital phlebotomy and leeches to the temples had been employed, together with hypodermic injections of quinine, and rectal injections of chloral, the urgent symptoms gradually subsided, and complete recovery ensued. About four hours after the temperature had reached its lowest point, it had again mounted to 103.75° F., and twenty grains of antipyrin were given hypodermically; after which, the fever gradually subsided. The doctor says that this was the worst case of sunstroke that he ever saw recover.

The second case had a rectal temperature of 110° F., and was, also, comatose and convulsed, though the convulsions were not nearly so violent as in the first case. Half a drachm of antipyrin was administered subcutaneously, and no cold applied except to the head. In thirty-five minutes, the temperature had

fallen to 101° F. Chloral hydrate, and whiskey were injected into the rectum, and Lente's solution of quinine under the skin. The following morning he was quite conscious. The cases were both followed up by the use of quinine and the bromide of sodium, for two or three days. W. calls attention to the fact that the coma and convulsions continued, in both cases, after the fall of temperature, and hints that the injury to the nervous centres, so persistent, even after the noxious influence of the hyperpyretic blood had been removed, would probably have been fatal had the fever been allowed to continue longer. He thinks that half a drachm of the drug would probably be sufficient to accomplish the purpose.

The New Treatment for Typhoid Fever.

The most recent abortive treatment for typhoid fever is suggestive of vigorous treatment for syphilis. Dr. KALB, of Germany, is the originator of it, and he has proven its efficacy in more than a hundred cases. It is as follows: Rub into the skin ninety grains of mercurial ointment daily, for six days; make the first application to the abdomen; the second to the inside of one of the thighs, the third to the other thigh, the fourth to the abdomen again, and the fifth and sixth to the thighs as before. After each application, at least half an hour should be spent in rubbing it in; this must not be left to the patient, but should be done by an efficient nurse. It is preferable to make the inunction in the evening. At the same time he gives seven and one-half grains of calomel and three-quarters of a grain of opium internally every five or six hours, the opium being given to prevent cathartic action of the calomel. Alco-

hol is administered in full doses, but no other medicine is given.

On the second day the temperature falls one half a degree or more, but the next day it rises again to its original height and remains at this point for seven days, and then falls to normal or nearly so, and does not rise again. But sometimes the temperature sinks to normal before the inunctions are completed; in which case they are to be continued just the same, for the temperature would be likely to rise again if discontinued. In a few days after the fall of the temperature the pulse falls to normal and the patient becomes convalescent; the spleen however, remains enlarged from ten to fourteen days.

KALB has carefully compared these results with the results of other modes of treatment, which shows advantages in favor of the former. He has even been reproached by patients who had not been anointed, upon seeing the anointed patients up and about, while they themselves were still confined to bed. The treatment is not successful if begun after the first nine or ten days. About twenty per cent. of cases do not seem to be susceptible to this treatment, but the remaining eighty per cent. are cured in the above remarkable manner. Whether the typhoid poison is counteracted by the mercury as syphilitic poison seems to be, we cannot say; but the clinical facts stand out in bold relief. Just how much of the credit may be given to the mercury, and how much to the alcohol does not appear; perhaps the virtue lies in their combined action. We do not wish to be understood as endorsing this treatment, but we present it as being worthy of attention, to be proven or disproven by further experience.—*Med. World.*

Successful Results of a New Treatment for Diphtheria.

Dr. R. J. UNNA read a paper before the American Medical Association recently in which he speaks as follows.—

The salient points of the treatment adopted are here as foreshadowed:

First. The frequent application to the membrane of the peroxide of hydrogen which will dissolve such portions of it as are soft and flocculent. The spray, with or without the soft camel's hair brush, will be found most useful in using this remedy, which can be applied also to the nasal passages.

Secondly. Having thoroughly cleaned away all the membrane which can thus be got rid of, powdered papayotin is applied to that which remains by means of a powder-blower, after which no food or medicine is given for twenty or thirty minutes, the object being to avoid as much as possible removing the papayotin from the membrane.

Thirdly. After twenty minutes or half an hour, the use of the general germicidal solution, (the solution of the biniodide of mercury having thus far proved itself superior to any other), is resumed in the manner just indicated, that is to say, a few drops administered every ten or fifteen minutes.

This course is pursued until the membrane has disappeared, when the use of the peroxide of hydrogen and of the papayotin is discontinued, but the sporicidal solution is still to be administered, but at more distant intervals, nor should its administration be stopped until all danger of paralysis is passed. The amount of medicine thus administered, is marvelously small when compared with the results obtained, a single grain sufficing for from three days to a week even in the height of the disease. The longest period for which the biniodide was used in any one case was two

months, and towards the last of that time but three doses a day were given. Occasionally, when there is evident depravement of the blood, a little syrup of the iodide of iron, proportioned to the age of the patient, has been added to the biniodide solution. Finally, if there is evidence that the disease has developed in the home of the patient, I strongly recommend removal to another house, whenever it can be possibly effected.

Effect of iodide of potassium.—There seems to be some probability that iodide of potassium acts specifically, or at least assists in the specific action of the mercurial salt. Although this salt occupies a low position in the scale of germicides, it certainly can exist in the system in quantities quite sufficient to materially modify bacterial development therein. The urine passed by patients who were taking iodide of potassium, and which held the salt in solution as evidenced by chemical reaction has been kept by me for months without undergoing any apparent change, while the urine from the same patients before the administration of the medicine underwent rapid decomposition. A similar condition has been observed to exist during the administration of salicylic acid (*Medical World*, Vol. III. P. 4), which may in some measure account for its value in the treatment of diphtheria.

If now the iodide of potassium, after being administered, can show itself in the urine in sufficient quantity to materially retard bacterial development, it certainly seems highly probable that its presence in the blood must tend to the production of a like result. It is therefore most unlikely that the iodide of potassium is an idle spectator of the germicidal operations of the biniodide of mercury, or simply a carrier of the latter salt, but it is rather present in the

double rôle of a vehicle and a germicidal ally. In accordance with this view, the strength of the solution of iodide of potassium used to dissolve the biniodide of mercury should be as great as the comfort of the patient will permit. That the biniodide of mercury is present in the blood is proved by the fact that "during the internal use of the mercurial preparations the urine always contained mercury." (Neubauer and Vogel on the Urine, P. 138.) For this reason the urine should be frequently examined, and the presence in it of the iodide of potassium be verified by analysis, thus insuring the permeation of the system by the germicidal salts.

The rapid diffusibility of the iodide of potassium is a great argument in favor of its employment. It is reported to have been detected in the urine six minutes after administration, and according to M. Melseus, the activity of the mercurial salts is greatly heightened by its use. Again, by the constant use of small doses of the iodohydroargyrate solution the elimination by the kidneys is balanced, and a constant stream of the germicide is, as it were, kept flowing through the system. *Theoretically*, the frequent doses of the medicine are demanded to prevent the germination of the bacterial elements of the disease, which may take place at short intervals of time, the exact period being at present unknown. Whether this theory be absolutely correct or not, the plan of administering the medicine founded upon it, works well in practice. Incidentally, I would mention that this remedy acts equally as well in follicular tonsillitis, and in aphthous deposit in various localities. It is worthy of trial wherever there is an abnormal process going on dependent upon bacterial growth.

Alkaline Iodides.—The peculiar action

of the iodide of potassium, naturally suggests the substitution for it of some other similar salt, such as the iodide of sodium or the iodide ammonium. Whether any of them would be an improvement upon the iodide of potassium I am unable at present to say; it is to be hoped, however, that further observations will be made in this direction. The antiseptic powers of bromine would also suggest for its salts a trial.

Results.—Up to the time of this writing, peroxide of hydrogen has been used by me, either alone or combined with other remedies. In fourteen cases of these, three terminated fatally, and eleven recovered without any sequelæ. Of the three fatal cases, one was treated with the peroxide alone, and, although the patient recovered from the direct attack, still the death resulted from the secondary effects of the disease, and should therefore be credited to that malady. A detailed account of this case has been already given.

Treatment for Malaria.

Dr. I. R. S., writing to *Med. World*, says: During my medical life I have resided in all kinds of malarial sections of our State, and have had considerable practice in what is generally known as malaria. With proper diagnosis, the different forms of it made no difference with regard to my treatment, which I began with the following: *R.* Mass. hydrarg. gr. vj.; ext. taraxici, gr. xvij.; ipecac. pulv., gr. j. *M.* et. ft. Pill. No. vj. *Sig.* One pill every four hours until all are taken, and if no motion of the bowels, order a saline.

Then I begin with the old, old remedy, quinia in solution, as follows: *R.* Quiniæ sulph., $\mathfrak{D}$ j.; acidi sulph aromat., q. s.; capsici pulv., gr. iv.; glycerini aquæ pulv., $\mathfrak{a}\mathfrak{a}$. $\mathfrak{z}$ j. *M.* Dose. Tablespoonful every three hours.

Should this arrest the paroxysm, I then put my patient upon arsenic; if otherwise, I continue the quinine until the paroxysms are arrested. Then to keep them off, I give arsenic, as follows: *R.* Fowler's solu., $\mathfrak{z}$ j. Dose. Five drops in a tablespoonful of water after eating, three times per day, until its physiological effects are noticed.

If I see that my patient needs a tonic, I order the following: Take of colombo, Virginia snake root, wild cherry bark, powdered gentian, drachms 2 each. *Mix.* Infuse by putting all into one pint of boiling water in an earthen crock, and simmer down to one-half pint, then strain, and add to the infusion one-half pint of good rye whisky. Dose. A tablespoonful or two before meals.

I find it necessary in some cases to continue the quinine, eight grains every six days for four weeks. I can say that I have had little difficulty in breaking up the chills and fever. I know that I have in many instances broken in upon a bilious or remittent fever by giving the hydrarg. et. tarax. pills.

The Treatment of Corpulence on Physiological Principles.

As analyzed by the *Birmingham Medical Review* (*Detroit Lancet*), EVSTEIN, in his work on corpulence, gives some practical points for the reduction of obesity.

According to him, fattening is strictly analogous to the fattening of cattle, and depends on over-feeding. He, however, disputes the current view that fat makes fat; on the contrary, he thinks fatty food protects the albumen and prevents its forming fat. His plan of treatment, therefore, consists in moderating the quantity of food, and while cutting off all vegetable carbo-hydrates, sugar, starch, etc., allowing a moderate quantity of fat, two or three ounces

daily, to be taken. He also suggests that the diet should be monotonous, greasy, and succulent, so as to cause satiety rapidly. He disallows beer, but permits light wines.

The plan advocated appears rational, and is free from the objection of Banting's method, which is too much like starvation. The following is the diet used successfully by Ebstein in one of his cases :

Breakfast.—One large cup of black tea—about half a pint—without sugar ; two ounces of white bread or brown bread, toasted, with plenty of butter.

Dinner.—Soup, often with marrow, from four to six and one-half ounces of roast or boiled meat, vegetables in moderation, leguminous preferably, and cabbages. Turnips were almost, and potatoes altogether, excluded. After dinner, a little fresh fruit. For second course, a salad, or stewed fruit without sugar. Two or three glasses of light wine; and immediately after dinner a large cup of tea, without milk or sugar.

Supper.—A large cup of black tea, as before. An egg, a little fat roast meat, or both, or some ham with its fat, bologna sausage, bread well buttered, occasionally a small quantity of cheese, and some fresh fruit.

On this diet the patient lost twenty pounds in six months.

Ebstein insists on the necessity of always keeping to the restricted diet, if the tendency to corpulence is to be successfully combated.

To Prevent Buzzing of Ears Produced by Quinine.

The distressing ear symptoms produced by the administration of quinine or salicylate of soda, are counteracted by the addition of small doses of ergot to the mixture.—*Ibid.*

Electricity in Collapse.

Dr. CASPAR GRISWOLD, in a paper on this subject in the *N. Y. Med. Journal*, concludes as follows :

1. Electricity *can not* be applied clinically in such a way as to stimulate the heart, literally speaking. In cases, however, where the heart is rapid, without much impairment in force, a mild current might be carefully applied over the pneumogastric in such a way as to restore the normal rhythm, and so increase the general efficiency of the heart's action. Cases are rare, however, where this would be indicated, rapidity, and irregularity of the heart's action being generally associated with such feebleness as would contra-indicate any stimulation of the pneumogastric.

2. The application of one pole in the neck, and the other over the præcordial space, directs the current to the pneumogastric nerve, and retards the heart instead of stimulating it. A strong current applied in this way may stop the heart and kill the patient instantly.

3. An electric current applied over the phrenic nerve necessarily stimulates the pneumogastric at the same time. This measure, therefore, always threatens as much in the way of cardiac depression as it promises in the way of respiratory stimulation.

4. Liability of the heart to be stopped by pneumogastric stimulation is not increased in aconite, ether, or opium poisoning. It is, therefore, permissible to cautiously apply electricity over the phrenic nerve in these conditions.

5. In heart failure from chloroform, and when morphine has been injected into a vein, the heart may be stopped by even a slight current applied to the pneumogastric. The application of electricity over the phrenic is, therefore, strongly contra-indicated under those conditions.

6. And, finally, it is emphasized that under no circumstances should a current strong enough to contract muscles elsewhere in the body be suddenly or incautiously applied over the phrenic or pneumogastric, or anywhere in the neck.

Progressive Atrophic Myopathy.

(Myopathy without neuropathy; commencing ordinarily in infancy in the face). As regards the diagnosis, it may be laid down as a rule that, in a given case of muscular atrophy, whatever the age, whatever the duration of the disease, if there is present atrophy of muscles of the face without any symptom whatever of bulbar paralysis, there can be no possible hesitation as to its nature: *myopathic atrophy*. Prior to the appearance of facial atrophy, however, there may arise some difficulty in diagnosis from myelopathic atrophy, when aid will be derived from an examination into the following points:

First. Myopathic atrophy affects muscles individually, and in a sphere of distribution of the same nerve are found muscles absolutely healthy and those absolutely destroyed.

Second. The prolonged conservation of certain muscles,—*i. e.*, supra- and infraspinatus, subscapular, and the flexors of the forearm.

Third. The absence of fibrillary contractions of the muscles, and the presence occasionally of retractions.

Fourth. Preservation of the tendon reflexes, absence of the reaction of degeneration, and the frequency of heredity.

From pseudo-hypertrophic muscular paralysis, it is distinguished by the fact that at no period of progressive atrophic myopathy is observed hypertrophy, either true or false, total or partial, passing or permanent, of a muscle or of part

of a muscle. From beginning to end it is *atrophy* of the muscular system which constitutes the only and unique symptom.

The integrity of the central and peripheral nervous system having been established by these investigators, they conclude, after careful study, that the disease consists in a species of primitive alteration of the muscular fibrillæ. From post-mortem examinations it has been demonstrated that this alteration is due to atrophy of the primitive bundles (with or without preceding hypertrophy), and, *as far as the alteration of contractile substance* (sarcous elements) is concerned, the lesion is like that of pseudo-hypertrophic paralysis, but the hypertrophy of the connective tissue is absolutely wanting in the former. Regarding the two affections as forms of a muscular cirrhosis, the former would be an *atrophic* cirrhosis, the latter *hypertrophic* cirrhosis.

The difference between this progressive parenchymatous muscular cirrhosis and neuropathic atrophies is the difference between a disease and a symptom.

The following conclusions will give a summary of the principal points in this interesting paper:

1. The affection described by Duchenne de Boulogne under the name of progressive muscular atrophy of childhood, and which hitherto has been regarded as being of the same nature as the spinal progressive muscular atrophy of the adult, appears to be a special disease, having nothing in common with the latter except the relations of symptomatological expression.

2. Whereas the latter is neuropathic and spinal in its origin, the former, from its very beginning, is purely muscular. This distinction is made prominent in the name, which separates a *myopathic* malady from one which is *myelopathic*.

3. Clinically, as well as pathologically, progressive atrophic myopathy is a disease entirely special in its etiology, its pathogeny, its symptoms, and its evolution.

4. This disorder (of the facio-scapulo-humeral type) commences most frequently in infancy, in the muscles of the face (muscles of expression). However, it may not appear until adolescence, or even at a more advanced age.

5. When it commences in childhood, the atrophy (of the orbicularis, labialis, and palpebralis) produces a peculiar physiognomy, which is most marked when laughing or crying, the incomplete movements of the lips and immobility of the features contrasting strongly with the animation of the eyes.

6. After appearing in the face in infancy, the malady begins to become generalized by attacking the muscles of the upper extremities, particularly those of the shoulder and forearm.

7. The muscles are affected individually, and not in groups. The supra- and infraspinatus and subscapular, and flexors of the hand and fingers, persist intact almost indefinitely.

8. The affected muscles atrophy from the beginning. There is no antecedent hypertrophy.

9. The muscles belonging to special apparatus (sight, mastication, deglutition, phonation) remain intact during the entire course of the disease. It is the same with the respiratory muscles.

10. The consistency of the muscles presents nothing particular. In some, however (the biceps among others), there is retraction of the muscular fibres, and contracture.

11. In all cases fibrillary contractions are completely wanting, and the idiomuscular contraction has disappeared, or is greatly diminished and difficult to demonstrate.

12. The electric contractility is only quantitatively modified : there is no reaction of degeneration.

13. Tendon reflexes usually are preserved, even when the muscles are atrophied. In some cases, however, they disappear very early.

14. General and special sensibility, the nutrition of the skin, the cutaneous reflexes, the action of the sphincters, are preserved during the whole course of the disease.

15. The progressive atrophic myopathy of adolescence, as of adult age (more rare than in infancy), *does not always begin with the face*. It may begin with the superior extremities, or more rarely in the inferior. The face is affected consecutively, or it may remain intact. This observation applies whether the case is one of the type facio-scapulo-humeral, or the type scapulo-humeral, or the type femoro-tibial.

16. The evolution of the disease is slow.

17. The lesion consists anatomically in an atrophic myositis, with slight sclerosis, without augmentation of volume.

18. The diagnosis of progressive atrophic myopathy from *spinal progressive muscular atrophy* (type Aran-Duchenne of Charcot, and scapulo-humeral type of Vulpian) is concerned only with the latter type.

a. The face is affected. In myelopathic atrophy the face is never affected; in atrophic myopathy in childhood, the face is always affected.

b. The face is not affected. The diagnosis is based upon the indefinite preservation of certain muscles, the absence of fibrillary contractions, the retraction (contracture) of certain muscles, the absence of reaction of degeneration, the preservation of tendon reflexes, the slowness of evolution, and heredity (direct or collateral).

These and other points serve also to

distinguish it from amyotropic lateral sclerosis.

19. It is distinguished from pseudo-hypertrophic paralysis by the following characters :

a. In atrophic myopathy it is *the rule* that the face shares in the atrophy.

b. In this disease hypertrophy is wanting. In short, pseudo-hypertrophic paralysis is an affection of early infancy, much more common among male children than female, and the patients rarely pass the twentieth year. In progressive atrophic myopathy the disease appears later (*seconde enfance*), in childhood most frequently, but may be observed at all periods of life. The sex is indifferent, and its duration is almost indefinite.

20. It is distinguished from the "juvenile form of Erb" by the participation of the face in the atrophy, the absence of pseudo-hypertrophy, and the frequency, if not the constancy, of heredity, direct or collateral.

The prognosis is grave, but life is prolonged because its course is slow and the muscles of special apparatus are spared (mastication, respiration, etc.).

The pathogeny is unknown. Heredity is the only ascertained etiological factor.

The treatment should be addressed to the building up of the general system, medication, and electro-therapy.

The rarity of the disease is believed to be only apparent. It has been probably more than once misconstrued, because in completely described and insufficiently studied.

However characteristic may be the physiognomy of a progressive atrophic myopathy, it may be overlooked by an eye which has not been previously instructed; therefore works on semeiology, in the consideration of the fact, should recognize the progressive atrophic myopathy of infancy and make mention of the *facies myopathique*.—*Med. Times*.

The Nature of Purpura.

In a contribution to the study of purpura (*Annales de Derm. et de Syph.*) M. LÉLOIR says that the pathogenesis of purpura is still surrounded by great obscurity. Few cases are recorded in which the vascular lesions have been ascertained. The author gives two cases in full detail, the first being a good example of vascular purpura, the lesions of the cutaneous vessels found on post-mortem examination being an enormous dilation of the vessels, and pronounced alterations of the vascular walls. In contrast with this case, in which the vascular origin appeared undeniable, he relates a second, in which no vascular lesions could be found, although there were numerous deep and extensive cutaneous hemorrhages. Here the cause evidently was an alteration of the blood. But in the first case, with appreciable lesions of the capillary vessels, the hemorrhages were small and limited; while in the second, with vessels apparently intact, the hemorrhages were extensive and situated in the middle region of the dermis. Diapedesis does not seem sufficient to account for such pronounced hemorrhages. In some part there must be vascular rupture. One may suppose (with Hayem) that in certain diseases the blood-plasma acquires the property of provoking the concretions by precipitations, leading to multiple capillary embolisms, and thus causing purpura hemorrhagica from hemorrhagic infarcts. Certain forms of purpura of the lower extremities, in cachectic subjects, may be explained by stagnation of the blood (often with edema), and alteration of the blood; intravascular fibrinous coagulation, formation of embolic clots, hemorrhagic infarcts, and cutaneous hemorrhage. It is probable that many cases of purpura arise from alter-

ation of the blood ; perhaps even sometimes purpura a frigore, purpura of rheumatism, etc., arise from blood dyscrasia leading to intravascular coagulation, clots by precipitation, or capillary embolisms. As to the nature of the alterations of the blood, many authors speak of the too great fluidity of the blood ; but the quantity of fibrin, far from being diminished, is frequently increased in purpura. The author would group the pathogenic causes of purpura thus :

A. Purpura from modifications of the vessels : 1. From perturbation of the capillary circulation, whatever its origin, leading to active or passive hyperemia, producing hemorrhage by diapedesis or by vascular rupture. 2. Purpura tégumentaire of Cornil. 3. Purpura from primary alteration of the vascular walls, and consecutive rupture of these walls.

B. Purpura from modifications of the blood : 1. Too great fluidity of the blood (?) (purpura by diapedesis.) 2. From vascular obstructions, determined by certain elements contained in the blood, leading to the formation of thromboses and embolisms. This purpura might occur from simple diapedesis ; it is more often hemorrhagic infarction of the skin. a. From formation of clots in blood dyscrasia. b. From embolisms formed by white corpuscles (leucocythemia etc.). c. From embolisms formed by bacteria or micrococci (septic diseases, etc.). d. From embolisms formed by altered blood elements (?).

c. Purpura nervosa. In practice, however, many cases will not fall completely into either group ; very often the origin seems to be complex. Alteration of the blood, troubles of the circulation, vascular lesions, disturbances of innervation, all causes of cutaneous hemorrhage, may co-exist in the same sub-

ject. In all probability, even dyscrasic purpura may be in certain cases the origin of secondary vascular lesions, secondary endarteritis. And it is probable that alteration of the blood often modifies the action of the vaso-motor nervous apparatus, central or peripheræ. In studying a case of purpura, it must not be forgotten, then, that its pathogenesis may be complex. The relative importance of the different causes must be sought ; and an attempt must be made to determine the relations between the determining primary or predisposing causes and the occasional or secondary causes.

A Test for Pleuritic Deformities.

All of the methods hitherto suggested for the detection and measurement of deformities caused by pleurisy have given untrustworthy results, as pointed out by M. PITRES in a recent article on the subject, in the *Gazette heb. des Sc. Med. de Bordeaux*—a fact which goes to prove that the corporeal changes caused by unilateral pleurisy are much more complicated than was formerly supposed. The truth is, that the two halves of the skeleton of the chest are so intimately associated that any corporal deformation on one side is counter-balanced by similar or compensatory deformation on the other. The arching of the breast (*voussure*) is the most important of these complex deformities, and is due to an unilateral distention of the thorax, which determines at one and the same time a costo-vertebral enlargement on the affected side, a retreat or shrinkage of the costo-vertebral angle of the healthy side and a rotary movement *en masse* of the mobile parts of the thorax around a rigid axis (represented by the vertebral column). It is very easy to make this displacement evident by a very simple manodiph-

teuvre devised by M. Pitres, and called by him the "process of the cord" (*procédé du cordeau*). It consists in stretching a string or cord from the exact centre of the sternal fourchette to the centre of the symphysis pubis. If the party under examination is healthy (so far as pleuritic effects are concerned), and not otherwise deformed, the cord will follow the exact centre of the sternum. With pleuritis, on the contrary, the cord will pass one, two or even three centimeters to one side of the median sternal line. Many tests have demonstrated the exactness of this process.—*St. Louis Med. and Sur. Jour.*

The External Use of Chloral for Night Sweats.

Nicolai ("Wratsch"; "St. Petersburg Med. Woch.") remarks that the usual remedies for night sweats have the disadvantage that the system soon becomes accustomed to their action, and that, consequently, the dose has to be so increased that unpleasant collateral effects are produced. The external use of chloral, he says, is free from this objection. He uses a mixture of two drachms of chloral and two beerglassfuls of equal parts of brandy and water. With this mixture the patient is bathed at bedtime. If this is not enough, a clean night shirt is put on which has been soaked in the solution and then dried. This treatment is said to be particularly successful with children, when the trouble is not due to phthisis.—*N. Y. Med. Jour.*

Tonic Mixture.

The following formula is recommended and used by Dr. C. F. McGuire, at the Southern Dispensary and Hospital of Brooklyn, as an excellent tonic in the convalescence of fevers: $\mathcal{R}$. Ol. aurantii, gtt. xv.; ol. limonis,

gtt. vii.; ol. cinnamoni., gtt. i.; alcoholis, $\mathfrak{z}$ viij.; quiniæ sulphatis, gr. viii.; red saunders, gr. iv.; ferri. pyrophosph., $\mathfrak{z}$ iii.; syr. simplicis, $\mathfrak{z}$ viij.; aquæ fervid. $\mathfrak{z}$ vi. M. et. sig. Tablespoonful after eating. Cut the oils with the alcohol, then mix in the saunders and quinine. Stir well, and add syrup. Before adding iron dissolve it in the hot water.

Mosquitos.

The effectiveness of the following mixture in keeping off mosquitos is vouched for by "The Angler": Three parts olive oil, two parts oil of pennyroyal, one part glycerine, one part ammonia. To be well shaken before applying to face and hands. Avoid getting the mixture into the eyes.—*North Western Lancet.*

DISEASES OF CIRCULATORY ORGANS.

Leech Secretion in Blood for Transfusion.

Dr. JOHN B. HAYCRAFT, in an article on coagulation of the blood (*Birmingham Medical Review*), states that he has prepared a watery extract of the secretion of the leech by cutting off the anterior third of a leech, placing it in absolute alcohol for the night; then cuts it into small pieces and extracts with a quarter of an ounce of 0.75 per cent. salt solution. Two drops of this added to a watch glass full of blood will cause it to remain fluid, while another portion drawn from the same animal will clot in a few minutes. If an extract of three or four leeches be injected into the veins of a dog or rabbit, little constitutional disturbance will be produced, but if a small portion of blood be withdrawn from the animal, it will refuse to coagulate. In a few hours the blood is normal, the active principle of the secretion having been eliminated from the

system by the kidneys. Some ten ounces of human blood shed into a vessel containing half an ounce of a 0.75 salt solution extract of three or four leeches would remain fluid for, at any rate, half an hour. It could be injected at leisure into the veins of the patient. It must be borne in mind that a pure watery extract may not be used, for the hæmoglobin would be dissolved out, and would produce dangerous symptoms when injected. In case of threatened thrombosis this solution might be injected into a vein, and it would certainly prevent coagulation for a time.—

Jour. Amer. Med. Assoc.

Varicocities of the Lingual Vein as a Diagnostic Sign.

G. CECIL DICKSON, in *British Medical Journal*, says, that under certain conditions, especially in elderly persons, the ranine and lingual veins become remarkably dilated and varicose; often they are much enlarged and present many bulgings, which extend in a racemose manner to the edge of the tongue. From observation he believes that this condition indicates important changes in the vascular circulation. In two cases in which this condition was marked, both eventually had cerebral hemorrhages. The lingual vein being a branch of the internal jugular, will indicate a state of the blood current in this vein, and thus show the condition of the entire intracranial venous system. Distensions and varicocities of the lingual will thus become associated with passive congestion in the brain sinuses, and thus point out the diseases that are liable to occur when this condition is present.

—*Louisville Med. News.*

DISEASES OF THE URINARY ORGANS.

Hæmaturia.

In an article published in *Det. Lancet*, Dr. L. E. MAIRE gives the following suggestions on treatment:

The treatment of hæmaturia will depend to a large extent upon the cause. If due to external injury, rest must be enjoined; indeed, this will be found necessary in all cases of hæmaturia. Opiates, if required, and relieving the bladder of accumulated urine, so as to prevent fermentation. In active hyperæmia of the kidneys local depletion by the use of wet or dry cups over the region of the kidneys will be found useful, together with active purgation. In the passive form of congestion, general stimulants and tonics will be found more useful, such as sulphuric acid, tinctura ferri mur., and the careful use of turpentine.

In cases of cancerous or tuberculous degeneration not much can be done, our attention being directed to prevent hæmorrhage as much as possible. The agents we use to attain this are rest, cold applied to the region of the diseased part, either in the way of external application or injection into the bladder, and the use of astringents or hæmostatics, such as ergot, gallic acid, digitalis, plumbi acetat., tr. ferri mur., alumen in solution and injected into the bladder, and turpentine where the hæmorrhage is not of renal origin. In one case I have been treating recently there seems to be a weakened condition of the sphincter vesicæ attending the hæmaturia, which was due to varices of the vesical veins. I added to the above remedies strychnine and belladonna in appropriate doses with marked advantage.

In the treatment of hæmaturia due to entozoa, I have no experience. The treatment recommended by Dr. John

Harley, who studied the disease among the inhabitants of the Cape of Good Hope, is the one used. He recommends a draught consisting of fifteen minims each of oils of turpentine and male fern, with five minims of chloroform in two ounces of tragacanth mucilage, to be given every morning. Where these entozoa were located in the bladder, he injected a solution of twenty to thirty grains of iodide of potash to five ounces of tepid water, every second or third day.

In hæmorrhage of the urethra very little difficulty, as a rule, will be encountered. Astringent injections, the application of cold and compression by means of card-board held in place by a number of elastic bands, will be found all that is required as a rule.

Semeiologic Value of Nephrozyme in Renal Affections.

As long ago as 1865, M. BECHAMP demonstrated, very neatly, that normal urine contained a substance of albuminoid nature possessing the general characteristics of the soluble ferments, and to which he gave the name of nephrozyme. This substance has the property of fluidifying and saccharifying starch, but is without effect on cane sugar. This hitherto unknown substance, which has always been reckoned with the extractive matters of urine, appears to be constant in its proportions, and is of relative importance, since it exists to the extent of 60 centigrams in the healthy adult male, and 33 centigrams in the adult female. Various reasons led M. Bechamp to place the seat of its manufacture or development in the kidney itself, and we (M. Bechamp and myself) have experimentally demonstrated that the relative percentage of nephrozyme is greater before the

urine reaches the bladder than in the bladder itself, or rather after the urine has remained for some time in that organ.

The following is our method of separating the ferment from the urine. The urine is first filtered and then is carefully treated with 3 volumes of 90 *per cent.* alcohol. The precipitate settles little by little and precipitation is complete at the end of 24 hours. The greater part of the supernatant liquor may now be decanted, the precipitate collected on a filter and repeatedly washed with alcohol of 75° until all matters soluble in this menstruum are washed out. The residue is nephrozyme. Dissolved in distilled water it will liquefy and saccharify starch.

In order to effect the perfect separation of the total amount contained in any specimen of urine, it is necessary that the foregoing manipulations be repeated several times. To facilitate the elimination of mineral substances it is recommended that a minute proportion of sodic acetate be added to the urine at the commencement of operations.

This substance (nephrozyme) has a significance and importance which is at once physiological and pathological.

The physiological interest lies in the fact that its existence demonstrates that the kidney, hitherto supposed to be merely a sort of filter, furnishes a true secretive product; that is to say, an entirely new organic compound which, previous to its manufacture by the kidney did not exist anywhere in the system, and whose presence in the urine indicates a true glandular function in that organ. This is a discovery which goes to show that there is no such radical differentiation between the secretive and excretive organs as we were formerly led to make and maintain.

From a clinical point of view all that has been learned of it hitherto, although the extent of this knowledge is very limited, tends to show us that nephrozymase has a real semeiological importance, particularly in so far as concerns the anatomic conditions of the kidneys in their primary and secondary affections. The attention of practitioners should be especially called to this point and they should be urged to examine carefully into the pathological conditions which in well determined cases, cause an augmentation or diminution of the nephrozymase.

Zymasuria, or an augmentation of the normal quantity of nephrozymase, has been noticed up to the present time by us in several cases of diabetes, in one case of renal congestion which ensued upon the retrocession of a cutaneous affection, and in a case of heart disease.

The absence of the element has been noted in several diseases which differed widely from each other in character, and it seems impossible to attach any special significance to the fact.

From all that we have said we may finally conclude :

I. That zymasuria is generally the introductory to a state of renal congestion, primary or secondary, but unattended by any notable alteration of the glandular epithelium.

II. That its total disappearance from the urine indicates a profound disorganization of the secretory epithelium and is peculiarly indicative of an advanced stage of Bright's disease.—Baltus, *Jour. des Sc. Med. de Lille*.—*St. Louis Med. and Surg. Journal*.

Diabetes.

Dr. TURNER, of Brooklyn, has had great success with the fl. ext. Eucalyptus, in 20 drop doses, four times a day.

DISEASES OF RESPIRATORY ORGANS.

The Innervation of the Laryngeal Muscles.

Dr. FRANKLIN H. HOOPER, of Boston, contributes to the *New York Medical Journal* of July 4th, a very able and interesting paper, on "The Respiratory Function of the Human Larynx," in which he details the results of a series of experiments conducted in the physiological laboratory of Harvard University, for the purpose of deciding some questions in regard to the innervation of the laryngeal muscles and their proneness to paralytic affection. It had been claimed, particularly by Dr. Felix Semon, of London, in an article which appeared in the *Archives of Laryngology* for 1881, that there was a "*proclivity of the abductor fibres of the recurrent laryngeal nerve to become affected sooner than the adductor fibres, or even exclusively, in cases of undoubted central or peripheral injury or disease of the roots or trunks of the pneumogastric spinal accessory or recurrent nerves,*" and this supposed proclivity was made the ground for an argument to the effect that there must be a separate cerebral centre or centres presiding over abduction, and that the fibres connecting that centre with the posterior crico-arytenoid muscle were, for some occult reason, more vulnerable than the fibres which supply the muscles of phonation.

Dr. Hooper denies the special susceptibility of the abductors to become paralyzed, basing his argument on the results of his experiments, and on general anatomical and physiological principles. He calls particular attention to the physiological importance of these muscles, which from birth to death, maintain a constant guard at the respiratory orifice, keeping the vocal bands always apart while respiration is going

on. He very justly classifies them with the muscles of organic life, and says : " In diffused progressive diseases of the nervo-muscular system, we know that of all muscles, except the heart itself, those belonging to the respiratory system are always the last to be attacked, and there is no valid reason why the respiratory muscles of the larynx—either one or both—should offer an exception to the rule, especially as they are the most important of all."

The Doctor found, in his experiments, that in slow destruction of the nerve, the movements of abduction were the last to disappear when the nerve was stimulated. He also found that in *profound* anæsthesia, with ether, the constrictor muscles lost their irritability before the abductors.

Neither Dr. Hooper nor Dr. Semon alludes to the fact, now admitted by all anatomical authorities, we believe, that the pneumogastric is a compound nerve, not alone by reason of its extra-cerebral communications with the other cranial and spinal nerves, but also on account of its combining, in its development, the fibres from a number of vertebral segments. According to the researches of Balfour, Marshall and others, it is probable that the pneumogastric represents at least eleven segmental nerves. From what points in the cerebral labyrinth they come, to join the main trunk, is, as yet, but imperfectly known; but they may be traced, to some extent, and with accuracy, by their proper and associated functions, and the close functional relation of the abductor fibres to the respiratory process, makes it certain that at least some of them have their origin in close proximity to the bulbar respiratory centre.

B. F. W.

Intra-Pulmonary Injections.

The treatment of phthisis has at all times been unsatisfactory; cases often progressing steadily downwards in spite of our most active therapeutics. Dr. W. C. PHILLIPS, in the *New York Med. Jour.*, records two cases of intra-pulmonary injections, one in advanced phthisis, and the other with a large superficial excavation.

Solutions of permanganate of potash, iodine and carbolic acid have been used by other experimenters with invariably good results. The doctor used Lugol's solution, diluted with five times its quantity of water, using an ordinary hypodermic syringe.

The injection causes but little pain, and is to be performed at full held inspiration, as it is then easier to keep the lung in repose. He suggests that the needle be graduated in inches and fractions thereof, thus enabling one to be more accurate.

Both of his cases were followed by good results; in one the improvement was marked.

The case of Pepper's, referred to in the article, has been seen a number of times by the writer in the Philadelphia Hospital. Her disease has undoubtedly been held in check by the injections used by Pepper ten years ago.

The doctor offers as suggestions, first, could not the injections be given with impunity much oftener than has been recommended by Pepper and Robinson? Second, is not the severe paroxysm of coughing caused by the injection being thrown directly into a bronchus?

In regard to the first, he says his patient received five injections in eight days, and the result has been not in the least disastrous. In regard to proposition second, each time that the patient had a paroxysm of coughing, she at the same time mentioned that she observed

the acrid iodine taste in her mouth; at times when she did not cough she complained of no taste in the mouth; hence, the conclusion is obvious that the cough is caused by the irritating effect of the fluid upon the membrane of some part of the bronchial tract.—*Med. and Sur. Jour.*

Chronic Bronchitis.

The following mixture is recommended by Dr. Proust to allay irritation in chronic pharyngitis :

R. Cocaine hydrochlorate, gr. iss. ; glycerine, ʒ ss. ; distilled water, ʒ j. ; carbolic acid, gr. 1-8 ; Sig. Paint over affected parts night and morning.—*Med. Times.*

DISEASES OF THE NERVOUS SYSTEM.

A Little-Known Symptom of Meningitis.

It is well known that most cases of tubercular and epidemic cerebro-spinal meningitis exhibit the classical symptoms of rigidity of the neck and back, which on the other hand does not characterize cases of purulent secondary meningitis. In nearly all these cases, under ordinary circumstances, the extremities remain supple, but contractures have been observed in a few. If, however, a patient with meningitis who presents this dorsal stiffness be raised up and made to sit on the edge of the bed, the rigidity becomes much more intense, and, what has hitherto escaped notice, contracture in flexion sets in at the knees, and sometimes at the elbows also. This symptom seems to depend on the flexion of the thigh on the trunk proper to sitting. If flexion is brought about while the patient is lying down, the contracture sets in, while the contracture vanishes when the patient stands upright. But it cannot while the

patient is reclining, be provoked by mere compression of the sciatic nerves. Contracture of the limbs, like that of the back and neck, characterizes the whole course of the disease ; it outlasts the fever, and is demonstrable in advanced convalescence. It has nothing in common with that rigidity of the back which may be induced in very old or very young patients who are suffering from some feverishness or from alcoholism. This, which comes on when the attempt is made to raise the patient in bed, is nothing but an instinctive resistance to movement of uncertain occurrence.

Since 1880 Kernig has had the opportunity of observing fifteen cases of undoubted meningitis, viz.: thirteen of infectious cerebro-spinal meningitis, one of tubercular and one of purulent cerebral parenchymatous nephritis. In every case the new symptom was noticed. In all other diseases, where the symptom was sought, it was absent, except in six cases of doubtful diagnosis, in which contracture of the legs occurred when the patient sat upright. In five of these, some serious affection of the cerebral or spinal meninges was discovered *post mortem*—œdema, pachymeningitis hæmorrhagica, thromboses of sinuses—and even in the sixth there was hyperæmia of the pia mater.—*Berlin, klin. Wochenschrift. Cincinnati Lancet and Clinic.*

Muriate of Ammonia in Neuralgia.

Dr. O. G. DARLING, of Brooklyn, N. Y., in the *Ther. Gaz.*, claims that mur. of ammonia in half drachm doses, every half hour, if necessary, until three or four doses have been taken, is a specific for facial neuralgia. He is in the habit of continuing the remedy in smaller

doses, say ten grains, three or four times a day for a day or two after the neuralgia subsides. It is also valuable for toothache.

DIGESTIVE TRACT.

Value of "The Diagonal Line" in the Diagnosis of Distension of the Gall-Bladder.

JOHN W. TAYLOR, F. R. C. S., Birmingham and Midland Hospital for Women, says: In an article on cholecystotomy in the *British Medical Journal* of January 31, 1885, I wrote as follows: "An important aid to diagnosis will, I think, be found in recognition of the diagonal line in the direction of which the gall-bladder enlarges. This is to be traced from the normal position of the larger end of the gall-bladder (near the tip of the cartilage of the tenth rib on the right side) to the opposing side of the abdomen, crossing the middle line slightly below the umbilicus."

Since writing the above, I have had some additional opportunities for testing the value of this aid to diagnosis. On February 15, 1885, I was asked to see a case of abdominal tumor by my friend Dr. Drury. There was no jaundice, and but little clinical history to be obtained in the limited time at my disposal. Finding, however, a well defined, hard, but rather resilient tumor, the longer axis of which exactly corresponded to the diagonal line described, I had no hesitation in diagnosing the case to be one of distension of the gall-bladder.

This opinion (in which Dr. Drury concurred) was considered erroneous by another surgeon of large experience, who saw the case subsequently: and, as the chief reason for my opinion was the sign which is the subject of my communication, the case became of some special importance to me as a test.

On March 26th Mr. Tait operated. The tumor proved to be a distended gall-bladder; and a large number of calculi were removed from it, two of these being of enormous size.

I should like to again draw the attention of the profession to this diagnostic line, as I believe it to be trustworthy and useful.—*British Med. Jour.*

The Fruit of the Calabash Tree as a Purgative.

According to Peckolt ("Nouveaux remèdes"), both the pulp and the expressed juice of this South American tree, *Crescentia cujete* [Linnæus], have long been used as laxatives in Brazil. The alcoholic extract, in doses of a grain and a half, is a laxative, and acts as a drastic in doses of seven or eight grains. The fresh pulp is also employed as an application in cases of erysipelas. It is boiled with water until it forms a black paste, then vinegar is added, and the mixture is boiled again. It is applied spread on linen.—*N. Y. Med. Jour.*

Safe Croton Oil.

If croton oil be shaken up with alcohol, its irritating properties are dissolved, and it acts as a powerful but benign purgative.—*Med World.*

Put Sugar in Your Coffee.

The injurious action of coffee on the organs of digestion is said to be obviated by the use of sugar with it, and in this case it is not only harmless but absolutely beneficial.—*Ibid.*

CONSTITUTIONAL DISEASES.

Cerebro-Spinal Fever.

THE experience of physicians in our country seems to be in favor of opium as the main remedial agent in epidemic cerebro-spinal meningitis. To be effective it must be given as early as possible, by all means before the symptoms of plastic effusion appear, and in decided, even heroic doses. Still some cases will die. But Dr. Lange, of Stettin, published a peculiar treatment of his own in the *Allg. Med. Centr. Zeit.*, May 6, 1885. He tried this treatment during the epidemic of 1864, and again in 1884, and found it so uniformly successful, that he recommends it as a specific cure for this dangerous malady. The records of a considerable number of cases accompanies the report. Although Lange's article is the leading one in the celebrated German medical journal (one of the best, oldest and most reliable in Germany), and although the article makes at least partly the impression of the writer's sincerity, the uniformly favorable result in this grave disease causes us to doubt the correctness of the author's diagnosis in every case. We do not think that he intends to deceive us, but we have the suspicion that he has himself been deceived. And yet he may be right, and for this reason alone, we publish in the following his method of treatment:

First, especially if the vomiting is intense, when the sod. bic. is increased in dose, L. administers: $\mathcal{R}$. Magnes. ust., $\mathfrak{z}$ i-gr. lxxx; cupri oxid. nigri. p., gr. iiiss; aquæ nicotian. destill., f. $\mathfrak{z}$ j; aquæ destillat., f. $\mathfrak{z}$ v. M. S.—First every hour, then every two hours, a tablespoonful. Then: $\mathcal{R}$. Sod. bicarbonatis, $\mathfrak{z}$ ijss; tragac., gr. v; aqua destill., f. $\mathfrak{z}$ v; aqua nicotian. destill., f. $\mathfrak{z}$ j; cupri oxid. nigri. p., gr. iiiss. M. S.—

Same as first. And: $\mathcal{R}$. Tinct. cupri acet., f. $\mathfrak{z}$ ss ($\mathfrak{M}$ xxx); aq. nicot. dest., f. $\mathfrak{z}$ j; aquæ cinnamomi., mucil., āāf. $\mathfrak{z}$ ss; aqua destil., f. $\mathfrak{z}$ iv. M. S.—A tablespoonful every two hours.

The first (magnesia) mixture is generally administered but once; as soon as its purgative action has been established, the bicarbonate of sodium mixture is substituted. (The fact mentioned alone causes us to doubt L.'s diagnosis, for in true cerebro-spinal fever the bowels are not thus easily moved.) "If constipation was not present," (?) continues the author, "then two bottles of the bicarbonate mixture are given, and with them the indication for the alkalines, which is never absent, is sufficiently fulfilled. Then the last mixture, containing tinct. cupri acet. is administered, and this is continued for some time after all symptoms have disappeared, as otherwise a relapse is apt to occur. (!?) How rapidly the doses should follow each other the severity of the case must determine."

Again, very peculiar are the concluding remarks of the author. He admits, that he believes in the infectious nature of the disease. He also acknowledges that neither copper nor tobacco are germicides, but thinks, as in other cases, it has also been shown that the destruction of the germs is impracticable, that the fact of copper, etc., not having that effect would be proof of the correctness of his views. "For," he concludes, "it is only necessary to preserve to the affected organs their normal power of resistance, and the remedies mentioned evidently effect this desirable result."

How copper and tobacco can preserve the power of resistance, normally lodged in the brain, is more than we can comprehend.

In one of the cases reported by L. he

did not see the patient until all the symptoms, which had been very mild in this case, had ceased, only the deafness remaining. "But," L. says, "convalescence set in, only the deafness did not improve, though I do not doubt that this also disappeared." As all the symptoms had already ceased when the case came under L.'s charge, convalescence must have been established ere L. saw the case; and how L. can suppose that the deafness left of its own account, without his having the slightest proof for it, is the more peculiar, as it is well known, whatever other sequelæ of this frightful disease might later yield to treatment, deafness is *the* one which never improves.

For some unexplained reason there may be some virtue in L.'s treatment, and considering the fatal character of the malady, it may be worth while to try L.'s method. But if he is as unreliable and shaky in his diagnosis as he is in his other statements, we do not promise ourselves any success with his treatment.—*Med. & Surg. Reporter*.

Swamp Fever.

Dr. J. H. HARRIS, writing to *Med. Brief*, says:

If the temperature runs high with intense cephalalgia, give: $\mathcal{R}$. Potass. brom., 1 drachm; tinct. aconiti rad., 16 minims; ext. gelsem, fl., 16 minims; aquæ dist., 2 ounces. *M.* Sig. A teaspoonful every hour until desired effects are obtained.

If it be a mild case try the following: $\mathcal{R}$. Ammon. carb., 1 drachm; tinct. digital, 32 minims; aquæ, 2 ounces. *M.* et ft. sol. Sig. A teaspoonful every three or four hours, to be continued as long as necessary.

Give quinia sulph., in five grain doses, every three or four hours, in all cases.

When fever subsides, give the fol-

lowing: $\mathcal{R}$. Quin. sulph., 1 drachm; ferri reduc., 1 drachm. *M.* et div. in cap., No. 20. Sig. Give three a day, one after each meal.

For intermittent fever, I give the following: $\mathcal{R}$. Quin. sulph., 1 drachm; xanthoxylin, 20 grains; leptandrin, 10 grains. *M.* ft. mass. et div. in pil., No. 30. Sig. Two pills three times a day. Beginning when the fever begins to subside.

For chronic chills try the following: $\mathcal{R}$. Elix. strich. ferri et quin., 4 ounces; sol. potass. arsen. (Fowler's sol.), 2 drachms. *M.* Sig. A teaspoonful in a wineglass of water, just after meals.

Salt Baths in the Treatment of Fever.

RABINOWITSCH (*Wratsch. Dtsch. Med. Zeitung*.) reports the results of treatment in the cases of sixteen patients, who received in all one hundred and forty-one baths. He says that not only did the addition of salt to the water cause a greater reduction of temperature, but the pulse and respiration were improved, and the patients felt much stronger than was the case after the use of fresh water.—*New York Med. Jour.*

The Treatment of Typhoid Fever.

Prof. J. M. DA COSTA (*Coll. and Clin. Record*.):

1. **HYGIENIC.**—Place the patient in a large, well ventilated room, so that he may get *plenty of fresh air*. Allow but one person (nurse) with him. Keep friends away. Enjoin cleanliness. Keep patient washed twice daily with vinegar and water, or a solution of permanganate of potassium. Disinfect the dejections with carbolic acid or chloride of zinc, etc.

Nourishment.—There are times when the patient is weakest, as in the early morning; this is the case in all low

fevers. Nourish him every two hours with beef or mutton broths, alternating with milk. Other broths, as chicken, etc., may be used. If the patient craves for more solid food, allow him at the mid day meal a little arrow root, boiled in milk, or a soft-boiled egg. Excepting these, allow no form of solid aliment until convalescence is completely established, and even then be careful. *Be sure to feed the patient between 4 A. M. and 5 A. M.*; even wake him at this time to feed him. Allow a liberal supply of water, or toast water, ginger syrup and water, or claret and water. It will keep the kidneys washed out.

2. MEDICAL TREATMENT.—Different plans have been instituted: 1. Quinine, which has been justly abandoned. 2. The mercurial plan—calomel, grs. v-x per diem, at the first stage of fever—said to modify the intensity of the fever process. Not an effective plan. 3. Carbolic acid, gtt. j-ij., in mint water, every two hours. This remedy is not to be relied upon. 4. Iodine treatment, as Lugol's solution, gtt. ij., four times a day. This promises something good in the way of treatment. 5. The plan used by Dr. Bartholow, in the following combination: $\mathcal{R}$. Acid. carbolic., f. 3 j.; tinct. iodinii, f. 3 ij. Dose, gtt. j-iiij., every two or three hours. This is a good plan of treatment: 6. My own plan is by the use of mineralacids. Those that use this plan in Germany, prefer sulphuric acid; in England, hydrochloric; in France, phosphoric, and in America, nitro-hydrochloric acids. Of the last, an ordinary prescription is $\mathfrak{m}$ xx of the dilute acid in simple elixir. This will also control, to some extent, the diarrhœa.

Do nothing else if you can possibly get along without, but guard against complications, and treat them immediately as they arise.

The first prominent symptom to be noticed is the *diarrhœa*. If there are but three stools, unless they be unusually large, do nothing. If very profuse, give a little tinct. opii camphorata at night, or an opium suppository, gr. j. Should this fail, use: $\mathcal{R}$. Bismuthi subnitrat, gr. x-xx; opii, gr. ss-j. Every three hours. If this fails, try carbolic acid, gtt. j., with morphinæ sulph., every three hours. Often cupri sulph., gr. 1-12, with opium, gr. 1-3, is very effective.

For the Tympany, cold applications, or injections of vinegar, f 3 j-ij. to water Oj. Internally administer turpentine, gtt. vij., in emulsion, with morphia, gr. 1-48. Often strychnia is useful, but secondary to the above.

Thoracic Symptoms.—The pulmonary congestion occasions cough; the patient's position must, therefore, be changed frequently. If the patient is not too feeble, use dry cups. The internal use of turpentine is of avail when marked fever is associated with the congestion. Do not give expectorants. If there is a large accumulation of mucus, use aromatic spirits of ammonia.

Sustain the Circulation by quinine in tonic doses, gr. vj-x., in the twenty-four hours, but alcohol is the best, repeated in small doses, to keep up the heart's action. In the early morning increase the dose. Under stimulus the pulse of 150 should come down to 120 or 110. The first sound of the heart is the key to the amount required. From four to ten ounces may be necessary. For nervous symptoms, as headache, delirium, etc., give opium with camphor or with belladonnæ. Chloral is the most useful, but do not give it when the heart is weak.

For high fever, cold water is excellent. Put the patient in a bath until the temperature of the water gets to

72° F. The tendency to intestinal hemorrhage is greater in this treatment than by quinine, which is next in importance, and should be given in doses of ʒj-3 ss. in the day.

For intestinal hemorrhage, ergotin, gr. ij-vij., hypodermically, or f. 3 j. fluid extract of ergot may be given every hour or two. Sulphuric acid is also useful. Opium, to keep the bowels at rest, is indispensable. Cut down milk and stimulus now.

Spreading tenderness (Peritonitis). Tinct. opii deodorat., gtt. x every hour, and gr. j. opium suppository at the same time. The suppository must not be repeated for four hours.

Should the patient have *parotitis*, ice is the best treatment; also tinct. ferri chloridi, to enrich the blood.

For the *functional palsies* use strychnia.

A New Antipyretic.

DR. FRANCIS KINNECUTT (*Medical Record*), during the past three months, has been carrying on a careful study of the effects of hydrochinon. The chemical name of this drug is dihydroxyl benzole, and it was found by Brieger (*Berlin Med. Wochenscher*, No. 29, 1884,) to be a marked antipyretic. Dr. K. has been giving it in doses of fifteen to twenty grains. The conclusions drawn from his experience are the following:

1. That in hydrochinon we possess a new and most efficient antipyretic.
2. That its use is apparently unattended with any injurious effects.
3. That the antipyretic effects of a single dose is comparatively temporary, resembling in this respect that of kairin, thallin, and antipyrin; that the maintenance of moderate temperature in hyperpyretic conditions can be safely obtained, however, by repeated doses.

4. That while apparently without effect in arresting a specific disease process, its employment is conservative and productive of a marked amelioration of many of the symptoms incident to high temperature.

5. That with our as yet limited experience with the drug, it should be given prudently, and its effects carefully observed.—*Louisville Med. News*.

Salicylic Lemonade.

The *British and Colonial Druggist* says that as a "hospital beverage," which has lately been found of very great value in cases of typhoid and other fevers, scurvy and gout, the following cannot be too widely known, it having been, we understand, first devised by a late medical officer attached to the Soudan expedition:

R. Fruct. limon, No. 10; acid citric, ʒ ss.; acid salicylic, grs. 200; sacch. alb., aqua, āā q. s.

Squeeze the lemons and put the juice aside; boil the fruit in half or three-quarters of a gallon of water for fifteen or twenty minutes; after standing six hours take out the lemons, and again press them before throwing the exhausted pieces away. Add the juice and citric acid to the liquid, boil five minutes, and strain. Whilst hot add the salicylic acid, and stir until dissolved. Sweeten to taste with the white sugar, and make up the bulk to one gallon with water.

Salicylic lemonade may be taken freely, either of the strength here given, or diluted with half its bulk of water. It should be freshly made every two or three days, unless it be permissible to "qualify" it by the addition of a little pure French brandy. If required to be in "bright" condition, add, when cold, a little beaten up white of egg, boil for three minutes, and filter. If found

rather too harsh for some tastes, dissolve in the boiling liquid, before straining, half an ounce of Nelson's patent opaque gelatine, previously swelled for five hours in cold water.—*Med. and Surg. Reporter.*

A Good Drink.

Lemonade is said to be one of the best and safest drinks for any person, whether in health or not, being suitable for all stomachic disorders, and excellent in sickness. Lemon juice is the best anti-scorbutic remedy known. If the gums are daily rubbed with lemon juice they will be kept in health. By the daily use of lemon instead of soap, chilblains will be prevented, and the hands kept white, soft and supple. It is also said that neuralgia may be cured by rubbing the part affected with a cut lemon. It is valuable in curing warts and removing dandruff on the head by rubbing the roots of the hair with it.—*Med. Summary.*

Ice for Congestive Chills.

L. B. ANDERSON states that during forty years he has pursued the method of treatment of congestive chills which was first introduced by his father in 1812. Externally he applies chloroform upon a handkerchief or other cloth folded several times. This will make a profound impression almost immediately when no perceptible effect is produced by mustard, capsicum or other similar agents. He applies it first to the epigastrium, then to other parts of the abdominal surface, and then to the spine. In addition to this he administers broken ice as rapidly as the patient can be induced to swallow it, and in large quantities, even to the extent of a quart or two. The ice affords relief to the patient, reduces the con-

gestion, restores the circulation to the surface, and when this effect is produced the patient is ready to receive and be benefited by quinine, which, in the stage of congestion, he regards as injurious, rather than helpful.—*Therap. Gazette.*

Anisic Acid as an Antipyretic.

One of the most recent additions to the list of antipyretic remedies is anisic acid, formed by the oxidation of the oil of anise. It occurs in the form of colorless, prismatic crystals, soluble in alcohol and ether. In its antipyretic effects it resembles salicylic acid, and it is decidedly antiseptic. It causes increased arterial tension, and has a feeble toxic action, causing epileptiform convulsions in animals when it is injected into the veins in large quantities. In its pure state it is said to form a good dressing for open sores. Its use as an antiseptic is not followed by any unpleasant after effects, as is sometimes the case with salicylate of sodium—*Pharm. Journ. and Trans.—Ther. Gazette.*

The Physiological and Therapeutic Action of Antipyrin.

DR. LÉON ARDUIN says of its physiological action:

1. Antipyrin, without doubt, influences the nervous system; its action is expended upon the medulla oblongata and cerebrum.

2. Its action upon the circulation is to diminish the force of the heart-beat; animals die of paralysis of the heart. From spectroscopic examination of the blood the drug does not seem to have any special action upon this fluid. According to Prof. Denme it is a poison to the protoplasm. As to the influence of antipyrin upon arterial tension, there is a great divergence of opinion, some

holding that it is accelerated, others that it is lowered. Queirolo, who has made special study of the action of the drug upon the blood-vessels of the skin, has constantly noticed that they become dilated, and by this effect it is, according to him, that antipyrin reduces temperature.

3. Antipyrin seems to have no great influence upon respiration; nevertheless it is admitted, in a general way, that the respiratory movements are diminished in frequency.

4. The action of antipyrin upon urinary secretion, is in many respects, still obscure. It is admitted, however, as demonstrated by Müller, that the urine is diminished to a very limited extent, the sulphates increased, while the urea is at the same time increased.

5. As to its hæmostatic effect, no explanation can at present be given, and it must suffice simply to remark such action.

6. How does antipyrin reduce temperature? The hypothesis that this special action of the drug is produced by the evaporation of the perspiration must be discarded, and in opposition to Queirolo, who explains this effect by the action upon the general circulation, or simply by its effect upon the vessels of the skin. Dr. Arduin inclines to the opinion that the reduction of temperature is the result of a direct action of the drug upon the *thermogenic centres*, and holds that in no other way can its prompt and certain antipyretic effect be explained.

The therapeutic application of the drug is stated as follows:

1. In all febrile diseases, not the simple fever, but the exaggeration of the fever, *i.e.*, hyperpyrexia, varying in each patient, is the indication for the use of apyretic medication.

2. In the severer febrile diseases, such

as typhoid fever, in tubercular patients, in pulmonary phthisis, the persistence of the fever constitutes a new indication.

3. To avoid the production of excessive and exhausting perspiration, and to avoid reducing the patient to a condition of adynamia, which may result from abuse of the drug, it should be administered in small doses.

Finally, in apyretic medication, only a physiological and clinical result should be sought, that is, no effort should be made to produce a normal temperature in a disease of which hyperpyrexia is a special characteristic.

The drug may be administered per rectum either by injection or suppository.

In the latter form it is not efficacious as an antipyretic, but of great service in some cases of hæmorrhoidal flux. The most desirable method of administration, however, is by mouth.

The antipyrin should be dissolved in a little sweetened water flavored with aqua menth. pip., or other aromatic, with which a little red wine may be advantageously incorporated. The dose is from 8 to 12 grains in phthisis; 15 to 45 grains in typhoid fever and other diseases in which great elevation of temperature is characteristic. No more than 15 grains should be given at a time, and the doses should be at intervals of about one hour.—*Bulletin Gen. de Therapeutique*.—*Am. Jour. Med. Sci.*

B. F. W.

The Therapeutic Uses of Antipyrin.

Dr. PUSINELLI summarizes the results of his investigations upon the therapeutic effects of antipyrin as follows:

1. Antipyrin operates in all cases, with the simple exception of rheumatism, as a safe means of lowering the temperature.

2. The duration of the time through which the antipyretic effect extends, depends upon the condition of the disease (?) and upon the size of the dose. Fifteen grains produce a marked effect in some febrile diseases for a period of two or three hours, thirty grains for from four to five hours, and forty-five grains for about six hours.

3. Before the treatment with antipyrin is begun, test-doses of the drug should be administered, of a strength varying from seven and a half to fifteen grains, in order to note the strength of individual doses.

4. In severe febrile diseases, as in typhoid fever, croupous pneumonia, erysipelas, etc., in which the temperature is very high, doses of thirty grains for men and of fifteen grains to women are indicated, and then only at intervals of an hour, and if the remedy can be endured in doses of this size. In private practice its administration every two or three hours is advisable. For complete defervescence from sixty to ninety grains daily suffice.

5. In diseases with a temperature but little above normal, and in chronic diseases, especially in phthisis with hectic fever, it is often necessary only to give a single dose of from fifteen to thirty grains, in order to obtain relief from the fever, of from six to twelve hours, and even for a longer period.

6. Against the febrile manifestations of acute articular rheumatism, the remedy is sometimes contra-indicated. Operation (influence ?) upon the joint disease was not observed.

7. In intermittent fever antipyrin is without effect; it sometimes is serviceable in cutting short the duration of the fever at its highest point at the time of its occurrence.

8. In no case of disease treated with antipyrin did it exercise a specific

effect, for example, as does quinine in intermittent fever. However, the course of typhoid fever, under treatment with antipyrin, is, perhaps, shorter and milder. In croupous pneumonia there is marked improvement of the general conditions under its use, without any effect being produced upon the local process of the disease in the lungs. Further, in phthisis with severe remittent fever, freedom from fever of several days' duration, with improvement of the general symptoms, is frequently manifested.

9. Antipyrin, generally speaking, is well borne. Collapse and chills were never noticed, pulse and respiration were not unfavorably influenced, and upon the kidneys no unfavorable effect was observed.

10. Unfavorable symptoms, due to an exanthem, occasionally were manifested, as sometimes were vomiting and perspiration. The vomiting was especially noticeable in women, rarely in men. To avoid the symptom of vomiting, administration of the drug by enemata may be resorted to; but, even then, the symptom is sometimes observed. The perspiration is only seldom disagreeable and harmful to the patient, and it then may be obviated by the contemporaneous administration of atropia.

11. Antipyrin has the great advantage over quinine of being easily soluble in water, and further, it is of itself capable of reducing the temperature, so that, for a long time, a perfectly normal bodily temperature is obtained, and this quinine is unable to accomplish.

12. Antipyrin is to be preferred to kairin and hydro-chevieri on account of its persistent effect upon the fever, and further, on account of the absence of collapse and chills during its use.—*Deutsche Med. Wochens.*—*Am. Jour. M. S.*

B. F. W.

The Therapeutic Action of Boldo.

Dr. LABORDE, in the *Revue de Therapeutique*, says that the glycoside of boldo is especially an hypnotic, and its use is indicated in those conditions where insomnia is to be combated, and it is desirable to obtain tranquil sleep. The drug, under such circumstances, presents marked advantages over the other hypnotics, especially over opium, in that it does not involve risk of establishing any condition analogous to the opium habit. Though the dose is large, the entire absence of toxic effect enables it to be given in large quantities without fear of bad results. It may be administered in doses of 15 grains, at intervals, until four or five doses, or even more, are taken. It is not only indicated in insomnia, but in cases where it is desired to regulate or re-establish certain secretions, notably those of the liver, kidneys, or salivary glands.—*Am. Jour. Med. S.* B. F. W.

Some Therapeutical Indications for the Use of Jaborandi.

Dr. Q. C. SMITH concludes an article in *Daniel's Medical Journal*, as follows:

Take a case of asthma of long standing, in which the usual line of routine orthodox and heterodox remedies have been plied in vain, the patient, as a result of prolonged laborious breathing, is worn down and exhausted to an alarming degree, and every hour seems to be his last. Now begin the use of jaborandi by administering a hypodermic composed thus: $\mathcal{R}$ Mur. pilocarpinæ, gr. 1-6; apomorphinæ, gr. 1-12. Mix and make a solution, and administer hypodermically. In many cases, within a few minutes, the patient is enabled to lie down and sleep—a precious boon he would not exchange for worlds of gold. This hypodermic dose will rarely need

repetition, if the treatment is followed up as we will indicate. To give permanency to the good work so well begun, promptly follow up the hypodermic with something like the following: $\mathcal{R}$ Fl. ex. jaborandi, oz. i.; fl. ex. grindelie robustæ, oz. ss.; syr. ipecac, oz. ss.; apomorphinæ, gr. i.; comp. syr. stillingie, qs. ft., oz. iv.: fiat sol. S. Teaspoonful three times a day, just after meals, to be continued for several months.

Again. In almost all cases of acute pulmonic inflammatory diseases, especially in their *earlier* stages—before pleuritic or other effusions have occurred—jaborandi is a remedy of wonderful remedial power. By lowering arterial tension, it relieves pain, cools fever, equalizes the disturbed circulation, and thereby diminishes pulmonary congestion, and enables the patient to breathe full, easy and naturally, and he drops into a gentle slumber, and as the observing old Coan Clinicien would say, “the critical sweat comes on, the secretions, excretions and fluids of the body are properly concocted,” and the convalescing patient—with proper after-treatment—rapidly recovers.

To speak in general terms, there are two important points concerning the therapeutic indications for the use of jaborandi. It should be administered *early* in any given case, and in comparatively small doses. The book-doses are *too large* for general use, and its use usually deferred to too late a period or stage of the case. For if given early, before fluids accumulate in the cavities of the body, that grave complication will, in many cases, be averted.

Again. In the early stages of the so-called “irritative fevers” of small children, especially if there are convulsions, or even slighter nervous disturbance, jaborandi—which, here, may be combined with small doses of tincture

gelsemium and bromide sodium—is an invaluable remedy.

A New Method of Administering Pepsin.

Dr. PROSSER JAMES, Lecturer on Materia Medica and Therapeutics, at the London Hospital, etc., says : In adding another to the numerous preparations of pepsin, it is unnecessary to enter upon its physiological or therapeutical action. Pepsin has conquered for itself an important position in modern practice, and the new preparation is simply designed to render its administration more easy, as well as more satisfactory. The importance of administering it within a short time of taking the food on which it is expected to act, has been generally appreciated, so far as giving directions for the dose to be taken a little before or after a meal ; but too often these directions are not implicitly followed, partly, perhaps, from the prejudice many patients have to take physic with their food ; moreover, this plan is ineffectual. In natural digestion the pepsin is not all poured on the food at once. By the movements of the stomach, its contents are successively exposed to the action of the gastric juice as they come in contact with the walls. To imitate this, we might take pepsin in successive portions ; but patients, who mostly think it hard to swallow a single dose of medicine with a meal, will not be easily persuaded to sip it, and they usually object to the taste of the liquids. There are other reasons why some of the preparations in common use are ineffectual. Thus, when taken with strong wines, the pepsin is precipitated, and the vinum is perhaps the worst preparation we can employ.

To secure pepsin being taken at the time it is required, that is, with the food on which it is to act, I have endeavored to convert it into a condiment. At first

I tried a sauce, but with less success than I had hoped. Considering that pepsin is so associated in digestion with hydrochloric acid that some have held that a definite compound—pepto-hydrochloric acid—is formed, it occurred to me that, as chloride of sodium is the universal condiment, a combination with that salt offered the most likely solution of the problem I had set myself.

A simple mixture of pepsin with salt may be successfully employed as a digestive condiment, provided it be freshly prepared each time ; for such a mixture, if kept, is apt to decompose, and the patient who has once observed this will take no more of the putrefying powder. How to overcome this difficulty was the next problem ; and this has been also solved. The pepsin and the chloride must be brought together in such a way that possibly a compound or peptochloride, may be formed. Whether such union occur or not, a powder thus prepared is quite stable. I have before me now a sample made many months ago, which has been used at intervals at the table, in place of common salt. It has a faint color, which is not objectionable, and used as table salt is nearly indistinguishable from that condiment. Here, then, is a digestive condiment, a peptic salt, which many may be glad to try, and which has already given me satisfaction.

Messrs. Savory & Moore, who manufacture digestive preparations on so large a scale, are now prepared to supply my preparation. I propose to call it “peptic salt,” or “digestive salt,” or it may be ordered in prescriptions, if preferred, as *sal-pepticus*, or as *peptochloride of sodium*. Ten grains of my peptic-salt will dissolve nearly 200 grains of hard-boiled albumen, or two ounces of lean cooked meat. It may take the place of table salt in the dyspeptic's

dietary. The special modes of using it in different cases and with different foods, would unduly lengthen this communication.—*Med. Med. Jour.*

DISEASES OF CIRCULATORY ORGANS.

An Experimental and Clinical Study of Air Embolism.

Dr. N. SEIM read a paper on this subject before the American Medical Association, in which he made the following points:

1. The presence of adventitious air in the vascular system during life gives rise to air embolism.

2. Each air-embolus constitutes a mechanical source of partial or complete obstruction to the flow of blood in the vessel in which it is located.

3. Aspiration during the inspiratory movements of the chest is the direct or exciting cause of the ingress of air into a wounded vein or sinus.

4. Elevation of the head is the sole predisposing cause of the entrance of air into wounds of the superior longitudinal sinus.

5. In veins, the predisposing causes consist in (a) elevation of the part wounded; (b) pathological or anatomical conditions, which prevent collapse of the vein when it is wounded.

6. Insufflation of a fatal quantity of air into a vein produces death by (a) mechanical over-distention of the right ventricle of the heart and paralysis in the diastole; (b) asphyxia from obstruction to the pulmonary circulation consequent upon embolism of the pulmonary artery.

7. Insufflation of the same quantity of air into arteries is less dangerous than when introduced into veins. When death is produced in this manner, it results from (a) acute cerebral

ischæmia; (b) secondary venous air embolism; (c) intense collateral engorgement of the vessels of the brain and spinal cord, the manner of death being determined by the amount of air injected and the direction in which the injection is thrown, as well as the time which has elapsed between the operation and the fatal termination.

8. Air injected into arteries is readily forced through the systemic capillaries into the venous circulation and right side of the heart by the powerful contractions of the left ventricle.

9. An air embolus of the pulmonary artery is relieved in a comparatively short time, provided the contractions of the right ventricle continue unimpaired for a sufficient length of time to force the air through the pulmonary capillaries into the general circulation.

10. The prophylactic treatment consists in proximal or double compression or ligation of the vein which is endangered by the operation.

11. The indirect treatment has for its objects (a) prevention of the admission of air; (b) administration by inhalation or hypodermatic injection of cardiac stimulants; (c) venesection.

12. The direct or operative treatment by (a) puncture and aspiration of the right ventricle; (b) catheterization and aspiration of right auricle, which is proposed to obviate the direct cause of death by the removal of air and spurious blood, thus relieving directly the over-distention of the right ventricle, and at the same time to guard against a fatal embolism of the pulmonary artery.

13. The results obtained by experiments on animals warrant the adoption of the operative treatment of air embolism in practice, as a last resort, in all cases where the indirect treatment has proved inadequate to meet the urgent indications.

Radial Pulse in Diagnosis of Aneurism of the Arch of the Aorta.

At a meeting of the Paris Hospital Medical Society (*Gaz. Heb.*, April 3, 1885), M. RENDU described an aneurism involving the whole aorta from its origin to the first portion of its descending limb, which presented an unusual history. The patient, male, aged 60 years, entered the hospital with double pneumonia, pleurisy on left side with small effusion and a pericarditis; all resulting from taking cold. There was also observed total absence of pulsation in the left carotid and territory of the left subclavian arteries. It was thought that the openings of the two arteries at their point of origin had become obliterated by an atheromatous plaque. Aneurism of the aorta was not suspected from absence of all prominence, of disturbance of pupil and larynx, and of all auscultatory signs; the heart beats were muffled only. At the post-mortem an enormous dilatation of the aorta was discovered, which was subdivided into two cavities by a sort of transverse band. The first containing the brachio-cephalic opening was free from all fibrinous clot; the second, with the left carotid and subclavian, was almost entirely obliterated by stratified layers of fibrin, the embouchure of those vessels being closed thereby. M. Rendu thought that absence of the radial and carotid pulse together, with increased pericardiac dulness, and an absence of cardiac and aortic murmurs, should lead one to suspect the condition found.—*St. Louis Med. and Surg. Jour.*

Cardiac Hypertrophy from rapid Growth of the Body.

Abstract in *London Medical Record*.—Prof. GERMAIN SEE, of Paris, has observed in a large number of young

men violent palpitations of the heart, which made him fear they would be unfit for military service. Experience soon taught him that these palpitations were not increased by exertion, but on the contrary disappeared as the man grew stronger. The palpitations were accompanied by a loud systolic murmur heard at the apex, but not over the large vessels. The heart was enlarged and the pulse often irregular. In some cases there was dyspnoea or frontal headache.

This is an example of how easy it may be to make an error in the diagnosis of cardiac affections. I imagine that most physicians hearing a loud systolic murmur located at the apex, in a young man who complained of dyspnoea, and palpitations, would be disposed to look upon the case with gravity, and many incautious ones give an unfavorable prognosis. What helps a physician's reputation with the laity more, than exact success in prognosis?—*Ibid.*

DISEASES OF THE NERVOUS SYSTEM.

Marriage Amongst Blood-Relations and Epilepsy.

In the *Deutsch Med. Zeit.* we find the following interesting communication of Dr. Klinkenberg, of Aix la Chapelle. As a result of marriage between two first cousins (children of brother and sister respectively) five children were born. Of these, three suffered from epileptic mania, so that they had to be transferred to an institution as incurably insane. The fourth child has thus far been apparently healthy, while the fifth, a boy, had epileptic seizures from time to time until he was seven years old. He now is twelve, and has had no attack since the time mentioned. But he also

suffered for a long time from diurnal and nocturnal incontinence of urine, which was finally cured by the application of the constant galvanic current. As the children were epileptic from their birth, as the family history does not indicate the least neurosis, not even neuralgia, or hysteria, or any other nervous disease, and as not only none of the parents, but also nobody in the family for generations has ever been a confirmed drunkard, there is scarcely a doubt that the epilepsy of the children is due to the blood-relation of their parents. This is the more probable, as such cases have been frequently reported.

On Aconitine in Neuralgia.

Though the deadly virulence of aconitine, even in minute quantities, will always form a serious obstacle to its gaining popularity among the medical public, we are in certain affections practically compelled to resort to it. We abstract from the *Gazette Medicale de Paris* (March 21, 1886), some considerations as to its physiological and therapeutic effect.

Aconitine is a powerful and rapid modifier of the nervous system; its predominant effect is concentrated at the base of the brain, consequently its influence extends over the entire system of the great sympathetic and the vast domain dependent upon the latter, enclosing the principal vital functions. Besides, it powerfully affects the sensitive nerves, reduces or suppresses their energy, and causes anæsthesia; at the same time it calms the circulation, diminishes the calibre of the capillaries, and lowers the temperature. These physiological properties, so characteristic of aconitine, render the drug peculiarly adapted for the relief of painful

affections, and especially of neuralgias. The remedy is most eligible in all forms of congestive neuralgia and dermodynia (dermalgia) which have their seat in the extremities of parts where the corpuscles of Pacini are abundant. In affections of the trigeminus the effects of aconitine are often marvellous, as illustrated by the following case. Nélaton had performed resection of all branches of the trifacial nerve on a patient without, however, in the least abating his excruciating pains. The patient, almost driven to despair, demanded another operation; extirpation of the Gasserian ganglion had been decided upon, when, upon the recommendation of Prof. Gubler, the employment of aconitine was tried. In a short time the patient expressed himself to be utterly free from all pain and continued to be so. In *tic douloureux* aconitine has often proved the only relief-affording remedy; the same may be said of irritating and painful affections of the respiratory tract, as in asthma and convulsive cough; also of nervous palpitations, angina pectoris, and in the painful acute forms of rheumatism and gout, where the drug claims both the nervous and vascular erethism. As certain patients are particularly susceptible to the action of aconitine, minute and largely-diluted doses of its solution have to be begun with. Granules exactly dosed are doubtlessly the most preferable preparations of aconitine.

Treatment of Chorea.

Prof. JOFFROY, in speaking at the new Hôpital des Enfants Malades on this subject, said, "I do not at all propose to make a critical review of all the medicines that have been proposed to cure this disease, but I will say at once that the principal medication employed at

this hospital is chloral, which is combined with packing in the wet sheet. I may say that I believe that chloral is the most powerful *anti-nerveux* that modern therapeutics possesses. In 1879 I first commenced its use here, when I gave it to two of our little patients who were seriously ill with chorea. It will interest you to learn how I employed the remedy. I gave a gramme of chloral every quarter of an hour until I obtained sleep, and when the child woke up I gave it another gramme. In this way it obtained sleep that was interrupted only twice in the twenty four hours,—just enough to give the patient two meals. After four days in one case and five in the other, I stopped the use of the chloral, not daring to continue it to keep up this profound and continuous slumber. In both of these patients there was a notable improvement. Most of those who have given this remedy have been satisfied with giving it to produce a little quiet or sleep from time to time. Our present method is to let them have it regularly three times a day,—morning, noon, and night,—and keep it up for two weeks, one month, even two months, until they are completely cured. I never had any accident with it, except that once in a while a sort of rubeola or erythematous eruption appeared, which did not last more than twenty-four hours, and often disappeared spontaneously, even when the treatment was kept up.

“This uniform method has had for effect a diminution of all the symptoms. I try to give them profound sleep at night, and also after meals during the day. The question of dose is important. Over ten years of age, I order four grammes of chloral in three doses,—one gramme in the morning, one gramme at noon, and the other two grammes at night. In children from six to eight

years old, the dose is less, and should never go over three grammes. In all cases you must feel your way, and graduate your doses in such a way that you get the sleep in a quarter of an hour after the dose, at least for the dose which you give at night. This mode of treatment must be then continued in a regular way until all the choreic agitation has been suppressed. To have your little patients accept this remedy, which you know has such a disagreeable and penetrating taste, you must disguise the taste. We proceed as follows. Take an aqueous concentrated solution of chloral, pure (nearly four grammes for one of water), and mix it with rather thick gooseberry jelly; make the mixture so that a teaspoonful of it will represent a gramme of the active principle, and they will take it readily as a dessert after their meals.

“You have been able to see yourselves, gentlemen, the good effects of this treatment. Several of our patients have presented a grave form of chorea, and you have seen them go on to cure in a regular way on this treatment being applied. It is quite an important result to be able to suppress at any moment these very violent agitations; and even if there be a regular duration of this disease, I believe that chloral will diminish it, so that it really has a curative action. In most of the cases chloral is all that is needed; but when you get a very violent case, with incessant agitation, with wearing of the skin, then comes the turn of another important therapeutic remedy. I mean the wet-pack. It may even be used in the light cases, but its real indication is found in the severe forms which are accompanied with fever, and where a fatal ending is feared. I give the wet-pack as follows, twice a day, morning and evening, employing cold water (10° to 12° C., say

55° F.). Well water is very good. The sheet is wetted and then slightly wrung out, and then it is spread out on a mat-trass that is first covered with an oil-cloth. The little patient is then put on it, and wrapped up and rubbed vigorously from head to foot. In one or two minutes, or as soon as the reaction is noticed, and the patient commences to warm up, without taking the wet sheet off we roll it over the child several times and cover him up with a large blanket, only leaving the head out, and he is taken to bed; he is left so for half an hour, in a sort of vapor bath. The effect is excellent. The child feels it at once, and a period of calm and repose follows, often with sound sleep, and when he wakes up he is better already. From these results I think I am authorized to propose the use of chloral and the wet sheet as a method of treatment applicable to most if not to all cases of chorea."—*Med. Times*.

DIGESTIVE TRACT.

Fothergill on Hepatic Disorders.

The functions of the liver and kidneys are closely linked together, and in those derangements where the urine has a thick sediment, and the bowels disordered, the old-fashioned doctor who shook his head and oracularly uttered "Liver!" was not such a fool as it has recently been the rule to regard him. First, cut down the amount of albuminoids eaten or drank, in order to reduce the demand upon the liver; then sweep away the waste from the blood by a pill at bed time: Pulv. pip. nig., grs. ij.; pil. cal. col. comp., grs. iij., and in the morning—Sodæ pot. tart., dr. j.; sodæ sulphatis, oz. ss.; tinct. zingiberis, dr. ss.; inf. gentian, oz. j.; with an equal quantity of boiling water, so as to make the draught as

hot as can comfortably be borne. Let this be done twice or thrice a week till the tongue is clean. When that is done, give the sodæ sulphat, dr. j.; sodæ pot. tart., oz. ss.; tinct. nuc. vom., gtt. vj.; inf. cascarillæ, oz. j. Ter in die; before meals, and the pill twice a week.

If there be general asthenia, do not proceed to give iron until the tongue is thoroughly clean, the water clear, and the appetite good; and then commence with two or three drops of the dialysed iron once a day, after food. In other cases, where there is only slight constipation, with deposits in the urine, especially after meals, give the old-fashioned dinner pill: Pulv. ipecacuanha, grs. j.; pulv. capsici, grs. ss.; ext. cinchonæ, grs. iij.; pil. at. et myrrh, grs. j., every day, after dinner. It will be found very efficacious. If this dinner pill does not act sufficiently, give the morning laxative twice or thrice a week, so long as the bowels require it. Then, as to the union of laxatives with tonics, it is well often to combine these two agents. In convalescence, tonics never act genially if there be not at the same time regular and sufficient action of the bowels; so, add sulphate of magnesia or sulphate of soda to the tonic: Mag. sulphate, grs. xx.; vel sodæ sulphat, dr. j.; quin. sulph., grs. j.; ac. phosph. dil., m. xv.; inf. gentian, oz. j. Ter in die before meals; and ten minims of dialysed iron after dinner, daily, will usually give good results. Or, Mag. sulphat, dr. j.; tinct. fer. mur. m. x.; liq. strychniæ, m. iv.; inf. quass., oz. j., ter in die; forms a less expensive tonic, of much utility.

But in this use of laxatives, with occasional mercurials, avoid the pitfall of letting the patient eat with unlicensed abandon.

Now, in conclusion, let me tell the student to strive to see what are the indications for treatment; what, in this

case, calls most imperiously for attention. He is taught too exclusively, at present, to look at disease from a dead-house point of view. To make a diagnosis which would be corroborated in the dead-house, is the great matter! Yes, so it is at a medical school; but in practice for yourself, remember that a living, grateful patient, who has got well under your care, is worth far, far more to you than any amount of accurate diagnosis—which, so far as other persons and their opinions are concerned, is as voiceless to further your interests as the tombstones in the churchyard which mark your failures.—*Indiana Med. Jour.*

The Treatment of Different Diseases of the Intestines with Naphthalin.

(*Jarb. f. Kinderh.* [from *Wiener Med. Blatter*, 43, 1844], B. xxii., H. 4.)

The use of naphthalin in intestinal diseases was suggested by its disinfecting properties. Therapeutic investigations showed that it could be tolerated in doses as large as five grams daily, without harm, since only a small portion is absorbed. The substance should be washed in alcohol until it is colorless, then dried and sublimed, which will leave it in large, white, beautifully formed crystals. Oil of bergamot may be added if it is to be given in the form of a powder. For injection purposes it may be given in the form of an emulsion, one gram being added to fifty or one hundred grams of distilled water, the mixture boiled and allowed to cool to 37° C. Usually this substance is well tolerated, but vomiting and retching are sometimes caused by it. In the acute intestinal catarrh of children very good results were obtained by the administration of naphthalin in doses of from one to two-tenths of a gram every three hours. In typhus fever good re-

sults were obtained by the simultaneous use of naphthalin and quinine.—*Arch. of Pediatrics.*

Gastro-Intestinal Indigestion.

KEATING recommends the following treatment of acute gastro-intestinal indigestion in teething children: $\mathcal{R}$ Hydrarg. chlor. mit., gr. i.; pulv. ipecac., gr. ss.; soda bicarb., gr. viij.; sacch. lact., gr. ix. M. ft. chart. iv. This is to be followed by a dose of castor oil, and then the child should be placed on a careful diet for a day or two, and given the wine of pepsin in half teaspoonful doses, or the elix. cinchona col.—*Archives of Pediatrics.*

How to Take a Pill.

Dr. ASHWALLIS (*Med. & Surg. Rep.*) says: Dr. Hanna's method, which I have tried with success on many patients who thought it impossible for them to swallow a pill in the ordinary way, is, *to place one or more pills under the tongue.* I repeat, place one or more pills under the tongue, then take a mouthful of water or other liquid and swallow (just as in the act of drinking). Invariably, the "I-cant-take-a-pill" patient is astonished, and will investigate his mouth with his fingers to reassure himself that he has really swallowed the pill. The success—secret—as you wish—lies in the fact that, in the act of drinking the tongue curves back upon itself; the pill, taken by the force of the current, is imperceptibly washed down the œsophagus.

DISEASES OF RESPIRATORY ORGANS.

The Treatment of Acute Coryza.

In a paper on this subject, published in the *Med. & Surg. Reporter*, Dr. J. A. ROBINSON said: On studying the relation between the state of the nasal

mucous membrane in the first stage of acute inflammation, and after an application of cocaine, the theory was formulated that cocaine should prove useful in aborting acute coryza, and it was determined to try it on the first opportunity. The details of the first experiment areas follows :

Miss S——, a soprano singer in one of our city churches, applied to me on the morning of February 22, and desired immediate relief from a "cold in the head." She complained that the previous night she had been exposed to a draft and awoke that morning with the cold, as evidenced by the fact that she could not breathe through the nose, and that her nose felt dry and painful, and she had lost the sense of smell. Inasmuch as she had to sing that night at a special service, she must have immediate relief.

Upon examination, I found all the conditions incident to the incipency of an acute coryza. Her temperature was 102° F., with acceleration of the pulse.

Febrifuges and a mild diaphoretic were prescribed. A local application of a four per cent. solution of hydrochlorate of cocaine was applied, as thoroughly as possible, to the congested mucous membrane, and the parts were sprayed, also, for some time with a warm alkaline spray, hoping thereby to reduce the hyperæmia. After having made another application of the cocaine, the patient was instructed to return home and follow the same line of treatment and to return the following day. She did not return until three days later, when she reported, to my surprise and gratification, that she had been able to sing as desired, and that no symptoms of the disease had returned.

The success which attended this new departure induced me to try it in other cases of acute coryza which were seen

early, and it has almost always been successful. Of course, the number of cases which we see in their forming stage are few, on account of the fact that the patients do not seek medical advice for this affection until the disease is well advanced.

In the use of cocaine for the purpose of aborting an acute coryza there are some objections; it has to be applied often in order to maintain its action on the inflamed mucous membrane, and it is an expensive drug. I have found that the use of a warm alkaline spray serves to prolong the sedative action of the cocaine.

Of course, dependence is not to be placed on local measures alone, but in addition proper attention is to be given to constitutional and hygienic treatment.

Dr. Tilley said he had used the hydrochlorate of cocaine in two or three cases of acute coryza with much satisfaction. According to one patient, an attack had ended with a single application. While he did not look upon cocaine as a sure cure for acute coryza, he thought it almost always did good. He referred to a serious accident which occurred to one of his patients during the use of cocaine. The patient was a boy aged twelve years, in whose nose a little cocaine had been used. After the first application he suffered a little nausea, which was not regarded as serious; after the second application the nausea was worse, but it was not until a third application had been made that the symptoms became alarming. These symptoms were difficulty of breathing, syncope, irregular action of the heart, cold perspiration and loss of sensation in the extremities. Notwithstanding these symptoms were alarming, the boy recovered quite rapidly. He had noticed reports of cases in the journals where the same symptoms had appeared.

CONSTITUTIONAL DISEASES.

Treatment of Typhoid Fever.

PROFESSOR EBSTEIN'S pamphlet on typhoid fever comprising as it does all the latest therapeutical procedures in vogue in Germany, a brief abstract of it will be at least interesting. From a material of two hundred and fifty-five observations Ebstein gathers the following conclusions :

1. The abortive treatment of typhoid fever with calomel is useful and recommendable. The exhibition of calomel is to be restricted to cases which have not yet proceeded to intestinal ulceration. The utility of this and every other abortive medication of typhoid fever is openly questioned by American practitioners.

2. There is no casual treatment of typhoid fever alongside of abortive measures, but solely a symptomatic one. Specialized diet and a supporting nutrition are as valuable as any therapeutic interference.

3. A persistently high temperature calls for interference only when complicated with threatening cardiac or nervous symptoms, or if the temperature itself endangers life. Ebstein tried the salicylate of sodium as an antipyretic, and administered it in the following manner :

He begins with large doses—75 grains—and decreases them to 45, 30, and 15 grains, or he gives frequent small doses of 7 to 15 grains. Cardiac weakness calls for an effective support by milk, soups, alcohol, camphor, flowers of benzoin, preparations of ammonia, and rubbing with moist cloths dipped into cold water.

Ebstein regards every bath as contraindicated in excessive cardiac weakness or threatening collapse. The great-

er the stupor the cooler is the bath he employs to revive the failing innervation. A low temperature and moderate cardiac weakness call for lukewarm baths, which also act as excellent sedatives and hypnotics in conditions of intense cerebral excitation. The gradually-cooled bath, as recommended by Ziemssen, Ebstein cannot recommend greatly. Although Ebstein admits that all cases occurring in Göttingen since 1878 did not require the bath, he nevertheless estimates their therapeutic value higher than that of any tried or known medication.—*Ther. Gazette.*

The Early Diagnosis of Typhoid Fever.

DR. HARDY calls attention to the following symptoms which he regards as in a certain sense characteristic of typhoid fever in the earliest stages (*L'Union Médicale*): There is cephalalgia, most often frontal, but sometimes occipital, and radiating into the neck, which may be somewhat stiff. The patient lies habitually on the back, and seldom moves. The face is somewhat pale, the countenance without expression, in general serious and grave, and a smile is seldom provoked. When the person is addressed directly he answers briefly and in monosyllables, although the intelligence is at this period usually unimpaired. There may be a little delirium at night, and insomnia is very constant. The tongue is red at the edges and at the tip, but whitish on the dorsal surface. The spleen is increased in volume. Diarrhœa, when present is accompanied with iliac gurgling. The temperature is elevated, but the pulse is not very frequent, is full and resisting, and sometimes dichrotic, though this is of less common occurrence than is generally supposed. The urine is usually diminished in quantity. The so-called *tache cérébrale* is readily produced, but of

more importance, as more especially diagnostic of typhoid fever, is the *corde musculaire*. If the biceps muscle be pinched between the thumb and index finger and snapped like a guitar string, a circumscribed contraction will occur at that point with the formation of a hard, tense swelling, which disappears after a brief period. If the patient, in whom no well-defined local trouble can be discovered, presents all the above-described symptoms, the diagnosis of typhoid fever can, Dr. Hardy claims, be made with almost absolute certainty.—*Medical Record*.

Neurotic Pyrexia.

That nervous influences can and do cause pyrexia we all recognize; the method of such causation or the relations between the effect and the portion of the nervous system from which the cause of the effect originates is not of any practical value, hence we pass by his theories, to note the case which Dr. W. Hale White records in one of our recent English exchanges. Since the patient died, and since Dr. H. of course offers no suggestions for treatment, we will note the case very briefly.

A temperate man, aged 63, goes to bed at night, apparently well; in the morning he is found insensible. When brought to the hospital, his left side is completely paralyzed—urine normal, temperature 98.7°, pulse 54 full, respirations 27 irregular. The temperature goes steadily up (with but one relapse), until on the morning of the fourth day, it reaches its highest point (105°), and the patient dies. The post-mortem reveals a large hemorrhage in the right corpus striatum, destroying the posterior two-thirds of the caudate and all the lenticular nucleus (except the deep basal part), the external and internal capsule, the claustrum (but not affecting the is-

land of Reil), and the anterior part of the optic thalamus. There was much red softening around the hemorrhage, which completely tore up the brain substance in the affected region, extending as far upwards as the level of the upper surface of the corpus collosum.—*Med. and Surg. Reporter*.

Warburg's Tincture.

In the discussion of the treatment of hemorrhagic malarial fever, which recently took place in New Orleans, there seemed to be a wide-spread belief among those familiar with the disease, that quinine, as ordinarily given, is of little value. It is a very curious evidence of conservatism that Warburg's tincture, which has been used with such extraordinary results in India in the treatment of malarial fevers of a malignant type, cannot obtain a fair trial in our Southern States. The testimony to its value has been very extraordinary, and we notice in the 27th issue of the Report of the China Imperial Maritime Customs, just received, that Dr. B. S. RINGER, of Amoy, reports a case of intermittent fever contracted at Hong-Kong, in which quinine and salicylate of sodium had been repeatedly tried without effect, and arsenic and aloes had also been essayed in vain, but in which the disease rapidly yielded to the administration of two drachms of the Warburg's tincture three times a day. The case had continued for many weeks, but under the influence of the Warburg's tincture the temperature fell three degrees in the course of a few days, and on the tenth day after use a normal temperature was recorded for the first time for thirty-two days. It will be noted that the method in which Dr. Ringer employed the Warburg's tincture is different from that commonly practised. As this tincture contains quinine, it has been alleged

that the remedy is only quinine concealed in a farrago of inert substances for the purposes of mystification. The importance of the subject justifies us in noting at length the words of Dr. B. S. Ringer in answer to this.

"I have treated remittent fevers of every degree of severity, contracted in the jungles of the Deccan and Mysore, at the base of mountain ranges in India on the Coromandel coast, in the pestilential highlands of the northern division of the Madras Presidency, in the malarial rivers of China, and in men brought to this (Netley) hospital from the swamps of the Gold Coast, and I affirm that I have never seen quinine when given alone act in the manner characteristic of this tincture; and although I yield to no one in my high opinion of the inestimable value of quinine, I have never seen a single dose of it given alone, to the extent of $9\frac{1}{2}$ grains, suffice to arrest an exacerbation of remittent fever, much less prevent its recurrence, while nothing is more common than to see the same quantity of the alkaloid in Warburg's tincture bring about both results."

Dr. Ringer states that the tincture has usually been administered by him in the following manner:

"One-half ounce (half of a bottle) is given alone, without dilution, after the bowels have been evacuated by any convenient purgative, all drink being withheld. In three hours the other half of the bottle is administered in the same way. Soon afterward, particularly in hot climates, profuse but seldom exhausting perspiration is produced. This has a strong aromatic odor, which I have often detected about the patient and his room the following day. With this there is a rapid decline of temperature, immediate abatement of frontal headache, in a word, complete defervescence, and

it seldom happens that a second bottle is required; if so, the dose must be repeated as above. In very adynamic cases, if the sweating threatens to prove exhausting, nourishment in the shape of beef-tea, with the addition of Liebig's extract, and some wine or brandy of good quality, may be required."

Owing to the complexity of the original formula of Warburg's tincture, and the expensiveness and apparent inertness of certain of the ingredients, there is a strong temptation on the part of manufacturers to depart from said formula, but it must be remembered that we do not know at all to which of its ingredients this polypharmaceutical owes its virtue. It is, therefore, entirely possible in any case that a drug left out is the important one. No practitioner has a right to consider that he has made a fair trial of the Warburg's tincture, unless it has been prepared by a pharmacist of known reputation, whose word has been given that he has in all respects conformed to the original instructions of Dr. Warburg.—*Therapeutic Gazette*.

Hay Fever.

Dr. W. CHEATHAM concludes an article in *Louis. Med. News* as follows:

As to the treatment: There are several means of destroying these areas. When the hypertrophy is very great, if possible, it should be snared off. They may also be destroyed by application of acids, such as chromic, glacial-acetic, and nitric; preference so far, however, appears to be given to the galvano-cautery. The latter is better because its action can be confined to the implicated space; yet it is very objectionable, for the reason that it is difficult to get a good battery, and that even the best are hard to manage: and again, if the exact amount of heat is not produced (cherry-red is the desideratum), either no effect

or a bad effect will result. I give preference to chromic acid. It is easily applied, is painless when cocaine is used, and by means of an alkaline wash the extent of its action may be reduced to a minimum. I would here suggest the employment of a paste composed of cocaine and chromic acid. I have not tried this combination, but intend soon to do so. From five to twenty-five applications are necessary, and there should be an interval of from three to five days between the applications.

The time for treatment: Treatment should be commenced preferably from five to eight weeks before the time of the access, although it may be and often is begun after the onset and continued through the period of the attack. I forgot to mention that the posterior sensitive area is the seat of the cause of the asthmatic symptoms, the anterior of that of the head symptoms, and the middle of both, and that the asthmatic symptoms are often not reflex, but a result of the extension of the catarrhal inflammation to the bronchi.

Again, in the management of these cases, some few may be relieved by curing an existing nasal catarrh.

Sajous concludes as follows:

1. That as a result of hereditary, or of diseases implicating markedly the nervous system, its nerve centres become abnormally sensitive, and are, therefore, inordinately influenced by the external elements to which they are naturally susceptible.

2. That, as a result of local disease, the portions of the nasal mucous membrane over which the branches of the sphenopalatine ganglion and those of the nasal branches of the ophthalmic nerves are distributed become hyperesthetic and capable of acting as media for the transmission of impressions made upon their surface to the nerve centres.

3. That, when these two conditions co-exist, and when external elements to which the nerve centres are inordinately sensitive, are present in the atmosphere, a paroxysm termed "hay-fever" is excited.

4. That the paroxysm can not take place unless the inordinate susceptibility of the nerve centres, the intra-nasal hyperesthesia, and the external irritating cause are present simultaneously.

5. That since one of the necessary elements, the external irritating cause is present only at a certain time of each year, the paroxysm can occur only at that time.

6. That, as a consequence of the above, the absence of one of the three elements necessary to the production of a paroxysm will prevent its occurrence.

7. That by cauterizing by means of the galvano-cautery or acids, the hyperesthetic portions of the membrane, their hyperesthesia can be permanently annulled.

8. That the medium between the external irritating cause and the systemic dyscrasia being thus obliterated, the periodical paroxysm termed "hay fever" becomes impossible.

9. That there are in the nose three hyperesthetic areas, for which the terms posterior, middle and anterior areas are proposed, and which are individually or conjointly the principal seats of the hyperesthesia in hay-fever subjects.

10. That the posterior area is principally implicated when reflex asthma is the most prominent symptom of the affection.

11. That the anterior area is principally implicated when head symptoms are alone present.

12. That when head symptoms and reflex asthma are present, both anterior and posterior areas are implicated.

13. That the middle area may alone

be the starting point of all the symptoms combined.

14. That catarrhal asthma has no relation with nasal hyperesthesia, being merely a result of the local inflammation occurring during a paroxysm.

In reference to treatment he suggests the following :

1. That all abnormal conditions of the nasal cavities, such as marked hypertrophies, polypi, exostosis, etc., must be eradicated before the superficial cauterization.

2. That the latter are productive of the best results when begun six weeks at least before the onset of the paroxysm.

3. That the treatment can be instituted during a paroxysm, the latter being arrested in some and beneficially modified in others.

4. That the immunity against "hay fever" depends upon the thoroughness with which the treatment is conducted.

The Therapeutic Value of Arsenic in Anæmia and Atrophic Conditions.

Dr. SAMUEL WILKES, in the *Lancet*, writes strongly in favor of arsenic in many diseases where skepticism as to its use on the part of a large portion of the profession has generally prevailed. There can be no doubt that many of the cutaneous affections cured by arsenic have a gouty origin, and therefore it is not surprising that the same remedy has a great power in preventing attacks of gout. Then, this gouty class of persons are often neuralgic, and it may be in them especially that arsenic is the best nervine remedy. He has found it amongst the most efficacious medicines, and in some cases the only remedy. Thus, before the introduction of nitrite of amyl and glonoine for angina pectoris, he relied mainly on arsenic, and in some cases kept off attacks for weeks where they had previ-

ously occurred almost daily. But the most remarkable effects of this remedy are seen in anæmia and various forms of cachexia and atrophy. One case which he cites was a lady 'about forty years of age, who was pronounced to be the subject of idiopathic anæmia. Her bloodless and feeble condition compelled her to keep her bed, and it was never believed that she would rise from it again. Arsenic was used, she soon began to improve, and in a few weeks was able to visit her doctor at his house. Her husband was not surprised at the action of the remedy, for, as he said, if he had a horse which was not "thrifty" he gave it arsenic, rendering it again plump and glossy. Another case of the so-called pernicious anæmia was in a gentleman who had gradually grown anæmic and breathless, so as to be unable to leave his house, and he walked with much difficulty. He took five drops of liquor arsenicalis, and in a month he was comparatively well. In most of the cases where arsenic has succeeded, iron had previously failed. It is, however, in wasting and general cachexia that Dr. Wilkes has been the most pleased with its action. He details several cases where there were evidences of extreme wasting and debility, attributable to no special disease, and where arsenic effected cures.

He has never given very large doses, generally four or five drops of the liquor arsenicalis three times a day, or a little more of the soda preparation; nor has he observed any injurious effects from its long use, although as is known, it becomes absorbed into the system, the urine showing its presence many weeks after its administration has ceased.

An editorial on this article, in the same number of the *Lancet*, considers

Dr. Wilkes' testimony as of great value, as coming from one who is far too much imbued with scientific caution to lavish undeserved credit on any pharmacopoeial preparation. The testimony of Dr. Wilkes on its efficacy in idiopathic anæmia is borne out by the experience of many physicians ; among the most recent being Dr. Warfinge, of Stockholm, who reported several cases of remarkably rapid arrest of the downward progress of the disease, and even of recovery, under the use of arsenic. All such cases should, however, be subjected to prolonged supervision, as it is notorious that relapses are prone to occur. The same remedy has been also successfully employed in an even more definite cachexia—viz.: Hodgkins' disease, where the administration of arsenic has been supplemented by its injection into the hyperplastic lymphatic glands, with, according to Winiwarter, astonishing results.

Diphtheria.

Dr. G. A. Tye closes an article published in *Canada Lancet*, as follows :

The throat should be kept as clean as possible with frequent gargles of hot water, which lessens the hyperæmia. Solutions of chlorate of potash are grateful. A soft camel's hair brush should always be used to make applications. There are many applications so equally good that it makes little difference which we employ. Sulphurous acid and glycerine, with the addition of thymol, is effectual and pleasant. Oil of eucalyptus and liquid petroleum make another good topical remedy. Lactic or acetic acid with glycerine I have found useful. The atomizer is an excellent instrument to make applications to the throat by the mouth, or through the nose, where the patient's age permits. Much harm can be done

by using violence to dress the throat. Solutions that permit of being swallowed are better than forcible swabbings. Formerly membranes were eagerly detached, leaving a raw, bloody surface, upon which a new membrane rapidly forms, often in 24 hours. The membranes should be well cleansed and disinfected, and allowed to drop off when ripe for separation, after which they rarely return. Loose, hanging portions can be removed with scissors. Rossback of Germany, after four years' trial, speaks favorably of the vegetable digestive papayotin. It acts well in an acid or an alkaline medicine. Dr. Lewis Smith mixes one drachm of Fairchild's extractum pancreatis with three of sod. bicarb, then adds one teaspoonful of this to six of water and pencils the fauces, and uses trypsin with the atomizer for membranes in the larynx. I am convinced of the power of tincture of iron, alcohol, quinine, and chlorate of potash, but the first mentioned is superior to all. These articles are all eminently safe, whether the tendency to death be from asthenia, or from asphyxia ; but the best effects of iron are seen only when administered in very large doses. Dr. Jacobi, in the *American System of Medicine*, recommends from 5 to 15 minims properly diluted every fifteen minutes or half hour, and I am sure from my own experience that this is valuable teaching. There is certainly a tolerance of the drug in this disease.

Alcohol given early and freely stands next to iron. Austin Flint, in an admirable article on Medicinal and non-Medicinal Therapeutics, thus speaks of alcohol in this and kindred affections : If alcohol be useful as a material for combustion within the body, it is indicated in the condition of fever, prior to the indication for its employment to

sustain the failing powers of life. The object from this point of view is to forestall these indications and prevent the asthenia. It is evident that employed with a view to test fairly its value as an antiseptic or parasiticide, or as an antidote, it is important that it should be employed early, continuously, and in as large quantities as it may be tolerated.

Chlorate of potash is a well-established remedy, but given in very large quantities will produce nephritis and albuminuria. Quinine in tonic doses is an excellent adjunct, but its bitter taste makes it difficult to administer to young children. When croupy symptoms appear there is still a possibility of arresting the further progress of the membrane by the increased dose of iron and alcohol. For many years I have found excellent results from the frequent administration of small doses of calomel, one gr. per hour, and free inunction of the neck with oleate of mercury. I know no remedy equally potent. The inhalation of moisture, in the form of vapor, is beyond doubt of considerable value. The atomizer is the best instrument for producing the vapor. I have tried to use ice, but my patients would never tolerate it long enough to judge of its merits.

The albumen of this disease is rarely due to a nephritis, but to congestion of the kidneys, for it rarely produces dropsy or uræmia, and recovery is rapid after the cessation of the cause. The dyspnœa produces general engorgement which the kidneys must share; or the vagus being effected, the heart is weakened, and the congestion is due to this cause. The paralysis of diphtheria is fortunately not very frequent; some epidemics are much more marked than others by its appearance, and unless it involves the heart, or the paralysis is

general, there is a strong tendency to spontaneous recovery. I have used faradism, but cannot say that it has hastened recovery. There is some evidence that galvanism has a beneficial influence. Professor Thacher, of Yale, has made some careful observations on the effects of massage, faradism and galvanism. There was a positive gain from galvanism, no effect from faradism, while massage seemed to lessen the power.

Belladonna as a Means of Producing Tolerance of the Iodide of Potassium.

The fact that belladonna produces dryness of the throat, nose and mouth, led Dr. P. Aubert (*Jour. de Méd.*,) to the idea of employing this substance to counteract the disagreeable effects produced by the iodide of potassium; and he reports three strongly-marked cases of intolerance of the iodide in which the addition of belladonna produced the most satisfactory results. He uses the belladonna in the form of the extract, of which two pills, each of 5 centigrammes, are given daily, one in the morning and one in the evening. In one of the cases which he reports, after several days' use of the combination of the iodide and belladonna, the latter could be discontinued without the iodide producing any disagreeable results. —*Thera. Gazette.*

Adonidin.

This substance is a glucoside derived from the adonis vernalis, a plant of the family of ranunculacæ. It increases arterial tension, regulates the action of the heart, and augments the renal secretion. It is administered in daily doses of one-thirteenth to one-ninth of a grain, gradually increased to one-third or one-half a grain. It is said to possess a cumulative action, and its ad-

ministration should therefore be suspended every fourth or sixth day.—*Med. Record.*

A New Alkaloid from Coca Leaves.

As [much as oculists already owe to the coca plant, their obligations are made still greater by the recent discovery of "hygrine," a new alkaloid obtained from the leaves after they have been exhausted of their cocaine. The new alkaloid has the property of promptly dilating the pupil. Fortunately this action is immediately counteracted by eserine, so that the oculist has the power to dilate the pupil and restore it to its normal condition at will.—*Med. World.*

DISEASES OF CIRCULATORY ORGANS.

The Effect of the Saline Ingredients of the Blood upon the Contractions of the Heart.

Such is the title of a paper by DR. SIDNEY RINGER, in the *British Medical Journal*. It is very well known that if blood or an artificial circulating fluid be sent through the cavities of a frog's heart, entirely detached from the body, the heart will continue to beat for some hours; and that this is also true of portions of the heart, as the lower third of the ventricle, which has long been supposed to be free from nervous ganglia. "Here, then, we have a means of testing with facility the immediate action of a drug on the whole heart, on the ventricle, or on a portion of the ventricle." He proposes, in this communication, to describe the behavior, "in physiological doses, of the natural salts of the circulation—the salts proper to the blood itself—on the frog's ventricle."

When pure water is made to flow through the ventricle, the condition known as water-rigor soon ensues, and the contractions cease. If common salt

be added to distilled water, in the same proportions in which it exists in the blood, the contractions grow more weak, contractility finally ceases, and the ventricle is arrested in diastole; a contraction cannot be now excited by even a strong galvanic induction shock. "The addition of any other of the saline constituents of the blood, save one, will not restore the suspended contractility. The only constituent which will restore the suspended contractility is lime. Spontaneous contractions at once return when the physiological proportion of lime salt is added to the solution. "Lime salts, therefore, will sustain the contractility of the ventricular muscular tissue, and indeed are essential to the maintenance of the contractility. In fact, without a lime salt, no single salt, nor all the saline constituents of the blood combined, can sustain contractility."

But the lime salts, though able to sustain the contractility of the heart, or to provoke it when it has disappeared, cannot maintain the circulation; "for the diminution of the dilatation, owing to the fusion of the beats, by a half or two-thirds, lessens correspondingly the amount of blood the ventricle can receive, and, therefore, propel into the arterial system." He shows that a potassium salt, in physiological quantity, obviates this difficulty, "and insures a perfectly natural contraction." The fusion of the beats is caused by the commencement of a contraction before dilatation is completed; but the addition of the potassium salt accelerates contraction, partially antagonizing the action of the lime salt, and the contraction is natural. "Thus we have produced, by the combination of calcium chloride, potassium chloride, and sodium chloride, a neutral solution capable of sustaining the ventricular contraction, and of producing perfectly

normal contractions." But this fluid is neutral in reaction, and though the contractions may continue for a while with a neutral fluid, they finally grow weaker and weaker; it is, therefore, necessary to add that which will alkalize the fluid—a physiological quantity of sodium bicarbonate. This effect of the sodium bicarbonate is due, the author thinks, to the fact that it neutralizes the acid developed in the contracting ventricle itself; for the addition of a very small quantity of acid to a circulating fluid is sufficient to arrest the contractions.

"The normal contraction of the ventricle, then, is the result of a mutual antagonism between calcium and sodium bicarbonate salts on the one hand, and potassium chloride on the other. We can modify, in various ways, the character of the contraction, by altering the normal relative quantities of these salts. . . . On this physiological antagonism the proper contraction of the heart depends. . . . In conclusion, let me urge a practical suggestion, which seems to spring naturally from these experiments. In cases of profuse hæmorrhage, as in flooding, or in the excessive alvine discharges of cholera, it is of cogent importance that we should employ a fluid suitable to the life-or-death case. . . . The foregoing inquiry points out that an effective injection should contain not only sodium bicarbonate, but likewise physiological quantities of salts of calcium and potassium."—*Jour. Amer. Med. Asso.*

Aneurism of Abdominal Aorta.

Dr. EDWIN ZIMMERMAN, of New York, kindly contributes the following:

Ida Johnson, thirty years of age, sick six months. She was first taken with pain in her right side, which was more or less continuous, followed by en-

largement of the right side of abdomen with flatness on percussion, due to a collection of fluid in peritoneal cavity, however, not great in amount. A prominent tumor, hard and pulsating, was well marked on right of median line, the pulsation was characteristic and synchronous with the second sound of the heart. There was also enlargement of the liver, which was easily distinguished by the great extent of dullness over the region of the liver.

Her health became gradually impaired, and emaciation was considerable with general debility. The above symptoms continued on until one day the nurse set her up in bed, she being weak and unable to support herself fell on her right side, striking on a board which was set up edgewise on her bed. She suddenly grew faint and prostrated, as if from profuse hemorrhage internally, and died in the course of a couple minutes. On post-mortem examination, the day after death, on opening the abdominal cavity, I found a considerable amount of blood more or less coagulated over the abdominal viscera. Also a considerable amount of serous fluid mixed with some pus and blood. The intestines were adherent to the abdominal walls by plastic matter. The left kidney was found large and ænemic. The right kidney was inclosed in a sack of fibro-plastic matter, and less than one-half of its normal size. The liver was considerably enlarged, and the right lobe elongated, extending about three inches below the floating ribs, the under surface was softened, and a small abscess was found which had recently burst, and its contents mixed with the effused fluid in the peritoneal cavity. Then coming down upon the abdominal aorta, after removing the intestines, I found the artery enormously enlarged, and its walls thickened in some places

to the extent of three-quarters of an inch. The aneurismal tumor extended from about one inch below the diaphragm, to within one inch and a half of the bifurcation of the abdominal aorta. The aneurismal tumor was found ruptured and the blood poured into peritoneal sac. To my surprise, after dissecting loose the walls of the aneurism, which was adherent to the surrounding parts by plastic matter, the result of diffuse peritonitis, I found that the bodies of the three last dorsal and first lumbar vertebra were worn off, so to speak, to the extent of one-third of an inch in depth; the peritoneum being first worn off, subsequently the bone itself was rasped away by the friction produced by the movement of the pulsating tumor. The cause of the sudden death was due to rupture of the aneurismal sac, produced by the fall on the board above named; thus giving rise to fatal hemorrhage.

Hypodermic Injections of Blood.

In the *Deutsches Archiv f. Klinische Medicin*, there is reported by v. ZIEMSEN a series of cases in which good results came from frequently repeated hypodermic injections of defibrinated human blood, 50 c.c. at each operation. Generally the amount (about 12 drams, was distributed by two points of injection). Antisepsis was carried out and the blood distributed in the meshes of the connective tissue by massage. No local inflammation, or fever, or hemoglobinuria ensued. The fact of the resorption was determined by the improved, general condition, and by previous and subsequent spectroscopic analysis of the hemoglobin of the patient's own blood. After every injection the amount of hemoglobin rose to a maximum within the first twenty-four hours; gradually thereupon the proportionate

amount became less again, but the final amount still remained higher than before the injection. Thus by successive hypodermic treatments a normal per cent. of hemoglobin may be attained. v. Ziemssen recommends this perfectly harmless proceeding in cases of dangerous anemia from various causes, also in leukemia, pseudoleukemia poisoning by illuminating gas, carbonic oxide, etc.—*Weekly Med. Rev.*

Sugar in the Blood.

Professor J. SEEGEN, of Vienna, recently published the results of his extended researches on the physiological relations of the sugar in the blood (*Wiener Med. Woch.*, No. 1, 1885). We abstract here his epitomized conclusions:

1. Sugar is, doubtlessly, a normal constituent of the blood.

2. Its quantity is larger than usually believed, viz., 0.1 to 0.15 per cent.

3. The blood passing from the liver contains double the quantity of sugar as the blood entering the liver. In thirteen instances Seegen found in the hepatic artery 0.119 per cent. of sugar and 0.230 per cent. in the portal veins.

4. Counting that the blood takes up, on the average, one per cent. of sugar in the liver, Seegen calculated that between 200 and 520 grammes of blood passed from the liver into the circulation during twenty-four hours.

5. Sugar (in the carnivorous animals, at least) is elaborated from the albumen of food. The greatest part of the carbon contained in the meat animals feed upon is utilized for the formation of sugar.

6. In experiments which excluded the liver from the circulation, the proportion of sugar in the blood was found to be decreased.

7. The formation of sugar in the liver and its utilization in the blood and

tissues, is one of the most important of tissue changes.—*Ther. Gazette.*

DISEASES OF THE URINARY ORGANS.

Treatment of Lithiasis.

DR. J. W. SPRINGTHORPE discusses this subject exhaustively in the *Australian Medical Journal*. As one of the main causes of lithiasis lies in *dietetic errors*, it is manifest that regulation of the diet is an essential part of treatment. It will be well to restrict the quantity of food in general, and of meat in particular, and to practically abandon the use of alcohol, except in certain cases where it may be required at meal times as a digestive stimulant, and at bedtime as an hypnotic. Porridge and milk, eggs and bacon, with fish, should replace the meat breakfast so commonly indulged in. Easily digested meats, such as mutton, beef, chicken, and white fish should replace pork, veal, sausages, salt meat, etc., which require more digestion; and rich dishes of all kinds, hashes, stews, pastry, new bread and the like, must be given up for stewed fruits, farinaceous puddings, salad, stale bread, and baked apples. Anything, in fact, that is found to throw extra work on the liver must be carefully avoided, especially by those who have no more liver than is sufficient for their ordinary needs.

In addition to thus limiting the diet in quantity and altering it in quality, *exercise in plenty* is to be rigorously enjoined. The reason of this is that it promotes the oxidation, and so facilitates the extrusion of the nitrogenous waste matters, and with the addition of sufficient diet, it maintains the bodily mechanism in an efficient working condition.

Adjuvant and equally useful measures are to be found in *free skin action* and *open bowels*.

In tropical and even temperate climates, like our own, the cutaneous functions demand almost as much attention as those of the kidney, and this is especially the case in the subject of lithiasis. Regular morning cold baths, if permissible on other grounds, as a general tonic, and weekly or bi-weekly warm baths, as necessary diaphoretics, are of very great importance. Indeed, in many cases, the simple use of a Turkish bath, repeated when necessary, may do more than any other single remedy to allay the systemic irritations of lithiasis. Free bowels are similarly always to be remembered as an important part of the treatment, and this, not only to the extent of preventing intestinal reabsorption of deleterious matters, but actively, to the extent of stimulating the liver and intestine occasionally to increased depurative action. Hence the utility of occasional mercurial, saline, and hepatic purgative, which may enable a liver otherwise choked by excessive action to resume its physiological functions.

Next we have the *directly medicinal treatment*. This is directed to counteract, as far as possible, the effects of this increased or abnormal nitrogenous waste in the blood, by sending everywhere such antidote as we have at command. Naturally, from the indefiniteness of our knowledge upon the minute chemistry of the different retrograde metamorphoses, treatment here is very much empirical, but fortunately it is often practically none the less successful. Based upon the fact that the uric acid stage seems the ultimate aim of the different changes, we find the best results follow from the administration of alkalies, especially the most soluble—lithia.

Lastly, the different systemic symptoms may demand *special treatment*. Atonic dyspepsia may be met with quinine before meals, and creosote after

meals. Hepatic congestion may require the addition of taraxicum, podophyllin, and the like, to the acid or alkali. If respiratory symptoms supervene, pot. bicarb. may be advantageously added to the expectorant or sedative. The circulatory symptoms may point to the need for digitalis to regulate the heart, or mercurial purgatives to lessen the blood tension. The nervous system may need a positive sedative in addition to the abstention from irritation, and pot. bromide, opium, or chloral may, in different cases, best serve the purpose; or the depurative organs may require special diaphoretic and diuretic stimulation.

Thus treated, dietetically, hygienically, and medicinally, it is rare to meet with a case of lithiasis that will resist all improvement, although, from duration and wide range of the disease, perfect recovery cannot always be hoped for. Still there is a vast majority of cases wherein the disorders are mainly functional, or if structural, only so to a slight extent, and in nearly all of these, where life is more or less a burden to the sufferer, and, too often, a nuisance to his fellows, perseverance in such a course of treatment may bring not only success to the physician, but a happier and useful life to the patient.—*Ther. Gazette.*

Diet in Diabetes Mellitus.

Dr. A. R. DAVIDSON, in *Buffalo Med. and Surg. Jour.*, gives the following diet:

Breakfast.—Oysters stewed, without milk or flour; clams stewed, without milk or flour.

Beefsteak, beefsteak with fried onions, broiled chicken, mutton or lamb chops, kidneys (broiled, stewed or deviled), tripe, pig's feet, game, ham, bacon, deviled turkey or chicken, sausage, corned-beef hash without potatoes,

minced beef, turkey, chicken or game with poached eggs.

All kinds of fish, fish-roe, fish-balls without potato.

Eggs cooked in any way except with flour or sugar, scrambled eggs with chipped smoked beef, picked salt cod-fish with eggs, omelets plain or with ham, with smoked beef, kidneys, asparagus-points, fine herbs, parsley, truffles or mushrooms.

Radishes, cucumbers, water-cresses, butter, pot-cheese.

Tea or coffee, with a little cream and no sugar. (Glycerine may be used instead of sugar, if desired.)

Light red wine for those who are in the habit of taking wine at breakfast.

Lunch or Tea.—Oysters or clams cooked in any way except with flour and milk, chicken, lobster or any kind of salad except potato, fish of all kinds, chops, steaks, ham, tongue, eggs, crabs or any kind of meat, head-cheese.

Red wine, dry sherry or Bass's ale.

Dinner.—Raw oysters, raw clams.

Soups.—Consomme of beef, of veal, of chicken or of turtle, consomme with asparagus-points, consomme with okra, ox-tail, turtle, terrapin, oyster or clam without flour or milk, chowder without milk or potato, mock turtle, mullagatawny, tomato, gumbo fillet.

Fish, etc.—All kinds of fish, lobsters, oysters, clams, terrapin, shrimps, crawfish, hard-shell crabs, soft-shell crabs. (No sauces containing flour or milk.)

Relishes.—Pickles, radishes, celery, sardines, anchovies, olives.

Meats.—All kinds of meat cooked in any way except with flour, all kinds of poultry without dressings containing bread or flour, calf's-head, kidney, sweet-breads, lamb-fries, ham, tongue, all kinds of game, veal, fowl, sweet-breads, etc., with currie, but not thickened with flour. (*No liver.*)

Vegetables.—Truffles, lettuce, romaine, chiccory, endive, cucumbers, spinach, sorrel, beet-tops, cauliflower, cabbage, Brussels-sprouts, dandelions, tomatoes, radishes, oyster-plant, celery, onions, string-beans, water-cresses, asparagus, artichauts, Jerusalem artichokes, parsley, mushrooms, all kinds of herbs.

Substitutes for Sweets.—Peaches preserved in brandy without sugar, wine jelly without sugar, gelee au kirsch without sugar, omelette au rhum without sugar, omelette a la vanille without sugar, gelee au rhum without sugar, gelee au cafe without sugar.

Miscellaneous.—Butter, cheese of all kinds, eggs cooked in all ways except with flour or sugar, sauces without sugar, milk or flour.

Almonds, hazel-nuts, walnuts, cocoanuts.

Tea or coffee with a little cream and without sugar. (Glycerine may be used instead of sugar, if desired.)

Moderately palatable ice-creams and wine-jellies may be made, sweetened with pure glycerine, but although these may be quite satisfactory for a time, they soon become distasteful.

Alcoholic Beverages.—Claret, burgundy, dry sherry, Bass's ale or bitter beer. (No sweet wines.)

DIGESTIVE TRACT.

Medicines which Stimulate the Liver.

Podophyllin in small doses, is a stimulant of the liver. During the increased secretion of bile, the percentage amount of special bile solids is not diminished. If the dose be too large, the secretion of bile is not increased. It is a powerful intestinal irritant.

Euonymin is a powerful hepatic stimulant. It is not nearly so powerful an irritant of the intestine as podophyllin.

Sanguinarian is a powerful hepatic

stimulant. It also stimulates the intestine, but not nearly so powerful as podophyllin.

Irisin is a powerful hepatic stimulant. It also stimulates the intestine, but not so powerfully as podophyllin.

Leptandrin is a hepatic stimulant of moderate power. It is a feeble intestinal stimulant.

Colocynth is a powerful hepatic as well as intestinal stimulant. It renders the bile more watery, but increases the secretion of biliary matter.

Jalap is a powerful hepatic as well as intestinal stimulant.

Menispermis does not stimulate the liver. It slightly irritates the intestinal glands.

Babington is a hepatic, and also an intestinal stimulant of considerable power.

Phytolacin is a hepatic stimulant of considerable power. It also slightly stimulates the intestinal glands.

Hydrastin is a moderately powerful hepatic stimulant, and a feeble intestinal stimulant.

Juglandin is a moderately powerful hepatic and mild intestinal stimulant.

Chloride of ammonium is credited with cholagogue properties, but it is questionable; nevertheless, it certainly stimulates the intestinal glands.

Calomel is a powerful purgative, but whether it stimulates the liver is still *sub judice*.

Corrosive sublimate is a potent hepatic stimulant, but acts feebly on the intestines.

Sulphate of potash is a powerful intestinal irritant, but its action on the liver is variable and unreliable.

Taraxicum is a feeble hepatic stimulant.

Dilute nitro-muriatic acid has a moderate stimulant action on the liver.

Boldo, bromide of potassium, nitrate of potash, and hard soap have each some stimulant action on the liver.

Dyspepsia.

PROF. DA COSTA.—*Coll. and Clin. Record.*—*Causes of Functional Indigestion.* 1. Eating too rapidly. 2. Drinking too much water at meal time. 3. Improper food. 4. Want of exercise. 6. Too much tea and coffee. 6. Too much tobacco.

Treatment.—Under-done meats and but little bread. No sweets. Pepsin sacch., gr. v, at each meal. The mineral acids before meals, as muriatic, nitro-muriatic, or phosphoric. Certain bitters, as nux vomica and strychnine combined with gentian or calombo. An alkali a few hours after meals when there is great acidity, but should not be used too frequently.

Dilatation of the Stomach.

Treatment: Dry, solid food; under-done meats; no milk. Carbolic acid to allay fermentation. Wash out stomach occasionally. Strychnia hypodermically or by mouth.—*Ibid.*

Chronic Gastritis.

Treatment: Cause to be removed. A scanty supply of food. Pepsin at each meal (gr. v). Milk, with a little meat, may be taken as food. Oxide of silver, gr. $\frac{1}{2}$, a dose, will be found of value. Bismuth is useful. Avoid tonics, but use the mineral waters to keep portal system drained.—*Ibid.*

Gastric Pain (Gastralgia).

Treatment: Diet of little importance. Stimulus at meals in small amounts. Morphia relieves at once, but use it carefully. 1. Bismuth, with a little opium. 2. Nitro-muriatic acid, gtt. ij-iiij, diluted, or—

R. Morph. sulph., gr. 1-32. Acid. carbolic, gtt. j. Aq. menth. pip. ad f 3 j. M. Sig.—Ter die.

Fowler's solution, beginning with gtt. j, and increase to gtt. v. ter die.

DISEASES OF RESPIRATORY ORGANS.**Pyridine.**

Pyridine is the name given to a new substance introduced by Prof. GERMAIN SÉE in the treatment of asthma. Wishing to ascertain the rationale of the treatment of asthma by the smoking of medicated cigarettes and the veritable physiological agent to which the cure is attributable, Prof. Sée, in conjunction with Dr. Bochefontaine, discovered by chemical analysis that the therapeutic action of the cigarettes was due to a uniform base formed by the combustion of certain plants and of certain alkaloids. This substance is pyridine, which is developed during the distillation of dry organic matters in the products of bony tissues (animal oil of Dippel), coal-tar, and certain important alkaloids, such as cinchonine, quinine and morphine; it is also found in the products condensed from the fumes of tobacco, and, finally, it is found in nicotine itself, in which a pyridic nucleus was discovered in 1880 by Cahours and Etard. Whatever its origin or mode of preparation pyridine is a colorless liquid, which evaporates in the air at an ordinary temperature, giving out a strong penetrating odor. It is mixible in water in all proportions, and forms with mineral acids very soluble salts, but which are easily disintegrated.

The best mode of introducing pyridine into the organism is neither by subcutaneous injections of its salts, on account of their rapid disintegration, nor by the inhalation of pure pyridine, which provokes nervous troubles; it is by aspiration that it acts best; four or five grammes are poured on to a plate, which is placed in a closed room containing about 25 cubic metres of air. The patient, occupying a corner of the room, thus breathes the air mixed with

the pyridic vapors ; each sitting should last from twenty to thirty minutes, and be repeated three times a day. Absorption is immediate, and the pyridine can be detected in the urine almost immediately after the commencement of an inhalation. The patients at once experience a marked diminution of the oppression so common to asthmatics, the breathing becomes easier, and they have no longer the intense longing for fresh air ; results due to the fact that the sensibility of the pneumogastric nerve and the excitability of the medulla oblongata are considerably diminished.

The action of the heart during this time becomes normal. After each sitting, the patients feel an irresistible tendency to sleep which becomes neither complete nor profound, and is not accompanied by insensibility. This effect of pyridine completely distinguishes it from the sleep produced by chloroform, ether, and the other anæsthetics in common use. While the sleep lasts, sensations, followed by reflex phenomena, are provoked with difficulty, although contractile energy is maintained. The administration of pyridine is not followed by paralysis, convulsions, or tremors ; but the muscles are relaxed, and temporarily lose their tonicity, in consequence of the lessened sensibility of the medulla oblongata and spinal cord. This modification of reflex sensibility is peculiar to pyridine, distinguishing it from the substances from which it is extracted, as, for example, nicotine and atropine.

The 14 cases in which Professor Sée tried the pyridine, were three women and eleven men, with ages ranging from 30 to 68 years, nine of whom were pure asthmatics, and five subjects of heart disease ; they were all more or less relieved. One patient who had suffered from asthma from childhood, and another who had had the disease for

twelve years, were greatly relieved by the treatment with pyridine, but it had to be discontinued in consequence of troublesome attacks of vertigo and nausea. The patients who presented cardiac and renal complications declared that respiration became much easier by the inhalations. Professor Sée therefore concludes that pyridine is preferable to hypodermic injections of morphia, its action being less dangerous than that of the latter, and it does not affect the general health. Its use, however, is indicated only for the relief of the fits of asthma ; but for the cure of the affection, Professor Sée places the greatest reliance on iodine and its preparations, for which he considers them as almost specific remedies, whether the asthma be of nervous or cardiac origin, while pyridine is the most useful adjuvant.

The following are the conclusions of the work addressed by Professor Sée to the Academy of Sciences on the treatment of asthma : 1. Whatever be the form of the asthma, whether it be primitive or of gouty or other origin, "ioduration" constitutes the veritable curative method. When iodism supervenes, pyridine should be employed, and it may be considered the most efficacious remedy against the attacks. In other words, pyridine is the best palliative, while iodine is the efficacious remedy. 2. Pyridine is superior to injections of morphia, its action is more durable and more inoffensive. 3. In simple nervo-pulmonary asthma the attacks may be completely arrested. For the severe form complicated with permanent pulmonary lesions, the treatment should be continued for eight or ten days after cessation of the attacks, in order to consolidate the amelioration obtained. In cases of cardiac asthma, with or without renal or dropsical complications, pyri-

dine may still render the greatest service by combatting the most persistent, the most distressing phenomena which torment cardiac patients; that is, oppression, whether continued or whether paroxysmal.—*Jour. Amer. Med. Asso.*

Cold Pedal Douche for Catarrh.

Medical science often seems to be a compound of contradictions. The hot foot-bath with or without mustard is a popular remedy for colds, whether of the head or chest. The use of the cold douche to the lower extremities for catarrhal maladies is not so well known, and by no means so frequently advocated. Recently, however, M. BOURGAREL has extolled the benefit of the cold douche to the feet in diseases of the respiratory passages. As all the world knows, the object of the pedal excitant is the production of *reaction*. M. BOURGAREL maintains that reaction is easily obtained by the application of cold, and for this purpose the douche need not be very forcible or long applied. It is recommended that the cold douche to the feet be systematically used. There can scarcely be a doubt of the value of this treatment, provided the cases in which it is prescribed are suitable. As a general tonic to the circulatory and nervous systems, the application of cold water under some pressure to even a small area of the superficies of the body stands in a high place. The beneficial effect on the system at large reflects itself on those parts which are in a less healthy or atonic state.—*Med. Herald.*

Inhalation in Coryza.

An inhalation for coryza is recommended in the *Union Médicale* by Dr. Hager, composed of pure carbolic acid, one hundred and fifty grains; ammonia

water, three drachms; alcohol, one ounce; distilled water, five drachms. A piece of cotton saturated with this mixture is placed in a wide-mouthed bottle, and the vapor is inhaled.—*Med. Times.*

Emollient Gargle.

Union Médicale de Paris, M. JASIEWICZ recommends the following in the acute stages of the different forms of pharyngitis. *Rx.* Cherry laurel water, 60 parts; acetate of morphia, 1-20 parts.

A tablespoonful, with two or three of warm water, is used every $\frac{1}{4}$ hour, being held in the mouth and allowed to trickle over the pharynx, by holding the head far back. Two or three such baths render the pharynx much less painful.—*St. Louis Med. and Surg. Jour*

Catarrh Remedy.

Rx. Comp. tinct, benzoin, tinct. tolu, each, oz. 2. Chloroform, sulphuric ether, each, dr. 1. Aromatic spts. of ammonia, oz. 1. Oil of tar, dr. 1. Rectified spts., oz. 5.

Mix—Use with Cutler's inhaler.—*Medical World.*

Hemoptysis.

DR. CURTIS (*Med. Rec.*) has been successful 15 times in immediately controlling it by a novel and original procedure. He adjusted pads and straps over the femoral and brachial veins, so far as to stop the venous current, but not the arterial, of one side. On the supervention of cyanosis of the limbs, the strapping was transferred to the other side. The straps were loosened a hole at a time, the holes being a quarter inch apart. This proceeding seems quite rational to me in venous hemoptysis.

CONSTITUTIONAL DISEASES.

The Treatment of Typhoid Fever.

Dr. N. S. DAVIS, in speaking of his treatment of typhoid fever at the Mercy Hospital, Chicago, recognizes fever indications to be fulfilled, or objects to be accomplished.

First, it is desirable to suspend, as far as practicable, the further action upon the patient of all the causes that may have contributed to the development of the disease.

Second, to restore the natural condition of the general properties of the tissues, and thereby retard or arrest those perverted molecular movements which constitute the disturbances of nutrition, secretion, excretion, etc.

Third, to promote the action of certain excretory organs, and thereby deterioration of the blood by the accumulation of the products of tissue-changes or waste matter.

Fourth, to counteract the development of important local diseases, either in the head, chest, or abdomen.

Fifth, to sustain the patient with nourishment suitably adjusted, both in quality and quantity, to the different stages of the disease.

The first indication is fulfilled by proper regulation of the patient's hygienic surroundings, and the exhibition of *potassium chlorate* in dilute acidulated solution. If this indication be fulfilled, and if the patient be supplied with "proper nourishment, in proper quantities," twenty-nine out of every thirty will recover without medication of any kind.

To fulfill the second indication, chief reliance is placed upon the "excitors of vital affinity," oxygen, potassium chlorate, sodium chloride, mercury bichloride, iodine, the mineral acids, and cold water.

The third indication is met by nitrous ether, *liquor ammonii acetatis*, and digitalis.

Under the fourth indication, attention must be directed to a number of organs.

1. The impairment of the functions of the brain and important nervous centres, "more especially those centres that govern the action of the vaso-motor, cardiac and respiratory nerves," is best remedied by the selection of those agents which increase the oxygenation and decarbonization of the blood. Strychnine and the mineral acids are the most effective drugs in this connection.

2. Hypostatic congestion of the lungs, muscular weakness of the heart, capillary bronchitis, and broncho-pneumonia are conditions which contraindicate alcohol in any form. Milk, beer, tea, eggs, coffee, meet the indication.

3. The changes in the alimentary canal, mesentery, spleen and liver demand the most rigid scrutiny.

The pathological changes in the glands of Peyer and Brunner are of greatest importance. The mineral acids, nitrate of silver, oil of turpentine, and strychnine "improve the tonicity of the smaller vessels, lessen passive congestion and exudation, and arrest the tendency to softening and disintegration by increasing the general property of the tissues, called vital affinity, or by increasing the vaso-motor nervous influence, or by both.

The fifth indication is fulfilled by the administration of proper food. Three propositions may govern the practitioner in this matter.

"First, choose such articles for nourishment as, either separately or conjoined, shall contain all the elementary constituents entering into the composition of the blood and organized structures of the human body.

"Second, the article or articles selected should be so prepared that when taken into the stomach they are capable of being taken up and assimilated with but little influence from the gastric and other secretions usually required for the digestion and absorption of ordinary food in health, because these secretions are generally much diminished, especially during the middle and later stages of the disease.

"Third, the quantity given at any one time should be so limited that it will be all absorbed or assimilated before any part of it has time to undergo fermentation or putrefactive changes, by which tympanites and the irritation of the glandular patches in the ileum might be increased, sufficient to afford the patient a fair degree of support."

Meat broths, from either mutton, beef, or chicken, seasoned with salt, milk, buttermilk, milk-whey, tea, coffee and water, correspond to these conditions.—*Ther. Gaz.*

A New Method of Giving a Bath in Typhoid Fever.

DR. H. C. WOOD, *Therap. Gazette*.—As is well known, the great difficulty in the use of the bath in fevers is the trouble which is involved in moving the patient in and out of the bath tub. The following simple device will in great part remedy this trouble and also save the necessity of providing a portable bath tub. The canvas of an ordinary bed cot is to be made three or four inches wider than it is ordinarily arranged, and a broad board nailed at each end so as to hold the cot permanently open and project above it several inches in the form of a head or foot board. This cot is then arranged alongside of the bed of the patient so as to be on a level with the bed and at the same time firm. Over it is spread an india-rubber

cloth sufficiently large to cover it entirely and to fall above and below over the head and footboard. The patient, wrapped in a sheet, is then slipped on to the cot; of course the canvas sags down, and when water is poured over the sheet the man lies half-immersed in a pool. If the attendant is provided with two tubs, one containing water and one empty, and also with a large bathing sponge, the water in this pool, heated by the body, can be removed by means of the sponge, and fresh cold water soured over the body enveloped in the sheet. In this way the water lying continually between the sheet and the body, as well as saturating the sheet, so envelops the person that the effect of a cold bath can be achieved, and I have seen very rapid reduction of obstinate high temperatures. If the bed upon which the patient lies be a very wide one, instead of a cot being used, the mattress can be so arranged on one side as to sag down sufficiently to form a hollow for the pool, and in this way the bath be given.

I notice that Stephan, of St. Petersburg, affirms that the application of ice bags over the super-clavicular regions is sufficient to control the temperature in fever, owing to the fact that the cold is brought into close contact with much of the blood of the body by the large superficial veins of the neck. I have had no experience, however, of this method of reducing temperature, but it is worthy of a trial; especially as it seems to be safer to reduce temperature in low fever by external cold, than by our at present known depressant antipyretic drugs.

Solutions of Eserine and Atropine.

Solutions of atropine and eserine prepared with camphor water, will keep one or two years.—*Rund. fur Pharmacie.*

Diet for the Sick.

In speaking of milk as a diet for the sick, Dr. WILLIAM ROBERTS (before the *Brit. Med. Ass.*) says, that not infrequently the stomach is not able to digest the milk and we have curds passing from the bowels; here he recommends peptonizing the milk by means of pancreatic extracts. The bitter flavor of peptonized milk is, however, nauseous to many invalids, and you cannot peptonize milk without developing this unpleasant flavor. One of the best means of covering the taste of peptonized milk is to add coffee to it. Another device, which may sometimes be adopted with advantage, is to add the pancreatic extract to cold or iced milk. In the cold the action of the ferment is comparatively slow, and it takes some hours to produce an appreciable change of flavor. But as soon as milk, thus charged with the ferment, is swallowed and passes into the warm atmosphere of the stomach, it is rapidly digested.

A new preparation, consisting of the pancreatic enzymes in a highly purified state, under the form of a light, nearly white powder, is absolutely free from taste and smell. Combating again the popular and erroneous idea of the nutritive value of beef tea, Dr. Roberts says: "Beef tea and its congeners, however, take rank as restoratives and stimulants, rather than as nutrients. They contain no albuminous matter in solution, and the small quantity of gelatin contained in them cannot be of much account. There is a wide spread misapprehension among the public in regard to the nutritive value of beef tea. The notion prevails that the nourishing qualities of the meat pass into the decoction, and that the dry, hard remnant of meat fibre which remains undissolved is exhausted of its nutritive properties; and this latter is often given to the cat or dog, or

even, as I have known, thrown away as useless rubbish into the midden. A deplorable amount of waste arises from the prevalence of this erroneous notion in the households of many who can ill afford it. The proteid matter of meat is, as you know, quite insoluble in boiling water, or in water heated above 160° F. The ingredients that pass into solution are the sapid extractives and salines of the meat, and nothing more, except some trifling amount of gelatin. The meat remnant, on the other hand, contains the real nutriment of the meat—and if this be beaten to a paste with a spoon, or pounded in a mortar, and duly flavored with salt and other condiments, it constitutes not only a highly nourishing and agreeable, but also an exceedingly digestible form of food."

Speaking of cold made meat infusions, he says: "Infusions made from minced meat with half its weight of water, and allowed to stand for two hours, and then pressed through cloth, were found on analysis to contain over four per cent. of dry albumen. This amount of proteid is equivalent to that contained in cow's milk. The nutritive value of such infusions is, therefore, very high. When heated to the boiling point they coagulate into a solid jelly. Made from beef or mutton, the product has an unpleasant bloody appearance; but when made from veal, the coloration is much paler. The best preparation, however, is made from the meat off the breast of a chicken."

While cooked eggs are more digestible than raw ones, yet when the stomach is weak and unable to digest solid food, beaten up eggs pass through the duodenum without being meddled with, and are slowly digested in their passage down the intestine.—*Med. and Surg. Reporter.*

Squibb on How to Use Nitrite of Amyl.

Good glass-stoppered vials of one ounce capacity, the stoppers being ground with extraordinary care, and the ground surfaces being slightly lubricated by a very minute quantity of soft white paraffine, are the best containers of this very difficult liquid; but there is another way of transporting and dispensing it that is well worthy of attention. It is not uncommonly put up and sold in the form of "pearls of nitrite of amyl," minute flattened flasks, the end of which has been sealed in the lamp after the flasks were filled. They vary in size, containing two to ten drops each. Formerly they were made of very thin glass, so as to be crushed by the fingers in a handkerchief; but a very large proportion of these were lost by spontaneous bursting, which created great dissatisfaction to buyers and a strong prejudice against them. Now, however, they are made of much thicker glass, and cannot be broken by the fingers, and the spontaneous bursting is now comparatively rare. But they now require some hard substance to break them. Enclosed in the folds of a handkerchief and laid upon a table, a smart blow with a closed pocket-knife is sufficient to break the glass and liberate the contents for use. They are sold by the dozen or by the hundred, as ordered, packed in cotton in paste-board boxes. One house sells them in boxes of one dozen each, and each box contains what is called a crusher, consisting of two small turned wooden boxes, one inside the other. The inner box holds two or three pearls, and between the bottom of the inside box and the bottom of the outside one is carried another pearl surrounded with a little cotton. This crusher is intended to be carried about the person, and when the effect of

the nitrite is needed the lid of the outside box is taken off and the inside box is forced down upon the pearl (a three drop pearl) beneath it, so as to crush it and allow the liquid to be absorbed by the cotton. The inner box is then taken out and the vapor inhaled from the outer box. This is much better than inhaling it from a handkerchief, because the diffusion is so rapid from the latter that it is difficult to get the vapor into the lungs in a sufficiently concentrated state as to get enough of it before it is dissipated. Although very convenient, an objection to the pearls is their comparatively high cost. By far the most economical and perhaps the best way of using the agent is to buy it in an ounce vial, and from this to replenish as often as needed. A very small pocket vial, say a 30 minim one, half filled, strong to avoid breakage, with as large a mouth as possible, with a good cork occasionally renewed. There are very few cases in which a sufficient effect cannot be obtained by smelling at the mouth of the vial with one nostril, the other being closed. Two inspirations from the mouth of a 30 minim vial is sufficient to flush the writer's face and increase the pulse rate 40 beats, and the effects pass off within $1\frac{1}{2}$ minutes, excepting the pulse rate, which diminishes less rapidly. A third inspiration ten or fifteen seconds after the two, very considerably increases the effect of the others, both in degree and duration, and gives about all the effect that is needed in a large proportion of cases. From time to time, as the effect becomes weaker, the residue in the pocket vial should be thrown away and a new supply obtained from the ounce vial, which should be kept in a cool, dark place.—*Ephemeris*.

Sterculia Acuminata. (Kola.)

DR. MONNET (Lille), after studying the physiological and therapeutic action of kola, reaches the following conclusions :—

1. Kola, through the caffeine and theobromine which it contains, acts as a heart tonic by accelerating the pulsations, increasing the dynamic power, and regularizing the contractions of the central circulatory organ.

2. In the second phase of its action, the pulsations become more ample and less numerous.

3. As a corollary to its action on sanguinous tension, diuresis is increased, and consequently, we can usefully employ kola in heart disease accompanied by dropsy.

4. It would seem as a result of our observations that kola, which energetically accelerates cardiac contractions and acts on the contractility of the muscles of organic life, should have, on the contrary, a paralyzing influence on striped muscular fibre when given in toxic doses.

5. Kola is an anti-consumer, an economizer which diminishes the organic waste (urea) resulting from the combustion of nitrogenous substances, by, probably, exercising a special action on the nervous system (nervous aliments of Mantegazza).

6. It is a powerful tonic through the principles which it contains, and is indicated in anæmia, in chronic affections of a debilitating form, and in convalescence from grave disease.

7. It should assist digestion, either by increasing the gastric secretion, or by acting on the muscular fibre of the stomach, which it should make less atonic in certain dyspepsias. Under its influence, we see rebellious anorexias disappear, and the digestive functions become regular.

8. Finally, it is an excellent anti-diarrhœic and has rendered good service in chronic diarrhœa.—*Med. & Surg. Reporter.*

Solution of Bismuth and Hydrastis.

F. R. A. (*Marshall Mich.*) The following is reproduced from a late number of the *National Drug* :—

In answer to a query in your last issue I can furnish you with a formula for a solution of bismuth and hydrastine. It is made as follows.

R. Hydrochlorate of hydrastine C. P. (white alk.) Ammonio citrate of bismuth, āā grs. iv ; distilled water. fl ʒ j.

Mix. This makes a perfectly clear solution for local use. Internally the dose of the hydrochlorate of hydrastine is from 1-8 to 1 grain.

C. P. means that the white soluble alkaloid should be of almost entire purity, and entirely free from the associated alkaloid (*berberine*), a very important particular respecting its therapeutic effect upon delicate mucous structures.

Usually the solution is reduced for use with two or more parts of distilled water. No aggravation follows its use under any circumstances, many practitioners employing its full strength.

The solution of hydrochlorate of hydrastine alone (omitting the bismuth) may be injected in the vagina or *os uteri*, in the usual manner, or absorbent cotton saturated with it may be introduced. Internally, in stomatitis, dysentery, etc., this latter solution may be given of full strength in doses of 10 to 30 drops, or in aggravated conditions, 60 drops three or four times daily, being reduced with a little water.

In fact, the solution of the white alkaloid hydrochlorate of hydrastine (either combined or not with the bismuth) is quite successfully used in all inflammations or ulcerations of the mucous

structures, such as of the stomach, eye, uterus, vagina, urethra, bladder, etc.

This salt being very hygroscopic, it is advisable that it should be ordered in bottles of comparative small amounts, depending upon quantity dispensed, to avoid frequent exposure to the atmosphere, and it will retain its powdered condition, if care is taken to push the stopper well in the bottle after dispensing.—*Drug. Cir.*

Neutralizing Cordial.

DR. JACOB VANVALKENBURG, writes substantially as follows to the *Eastern Medical Journal*:—I use the following with satisfaction:

℞. Rhei extracti fluidi; potassii bicarb., vel sodii bicarb.; spiritus menthæ pip. aa, ʒ ij.; alcoholis, ʒ iv. syrup simplicis, O ij. infusi menthæ viridis, q. s. ad O iv.

Directions.—Add the rhubarb, the peppermint essence in alcohol; then dissolve the potash or soda in some of the warm mint tea, add and shake up; then add the simple syrup, and lastly add spearmint tea sufficient to make half a gallon of the syrup.

Dose for an adult, tablespoonful; for children, in proportion to age.

Its virtues in cholera infantum, cholera morbus, dysentery and diarrhœa are so well known to our physicians that I need not describe them. In atonic dyspepsia I frequently combine it with the compound tincture of gentian with good results. Combined with the fluid extract of golden seal and tris-nitrate of bismuth in chronic gastric catarrh, you have an excellent remedy. In certain forms of diarrhœa, mixed with the essence of cinnamon and the tincture of prickly ash berries, it rarely disappoints the practitioner. Recently in the treatment of constipation, I have added it to the fluid extract of cascara sagrada, to

conceal the taste and regulate the action of the latter, and use it instead of the "Cascara Cordial," and find it to be a happy combination.

Therapeutic Hints and Approved Formulæ.

Dr. SAM'L S. WALLIAN, (*Med. World*).

Dysentery.—Full hot bath, followed by thorough and continuous fomentations over the whole abdomen, and free enemata of as hot water as can be borne. Instead of clear water, milk and water may be used, or a weak solution of chlorate of potassium.

Strict abstinence from solid food must be enjoined, milk or Mellin's food forming the best diet. Sub carbonate of bismuth, or benzoate of soda in 10 grain doses, each dose to be followed by half a pint of hot flaxseed tea, hot milk and water, or simply *very hot* water, is an excellent treatment.

Dysmenorrhœa.—Apiol, monobromated camphor, permanganate of potassium, hot hip and sitz baths, massage, electricity, either galvanic, faradic, or both alternately; cemicifuga, viburnum opulus, oxygen and nitrogen monoxide combined.

Dyspepsia.—Hydra-headed and many-featured dyspepsia:—

First wash out the stomach. How shall this be done?

Use a stomach tube of softest rubber, with or without pump attached, or if squeamishness on the part of either patient or *practitioner* makes this infeasible, establish a thorough system of *hot water drinking*. Let there be imbibed (sipped slowly) twelve to sixteen ounces of very hot water (simple water is not flat when decidedly *hot*), or hot, weak lemonade or tamarind water, *an hour or more* before each meal and at bed time.

This should be punctually and persistently followed for from two to six months.

The diet may be varied and should be nutritious and as liberal in quantity as can be well managed by the system. Starvation is bad treatment; overfeeding is also bad. Massage, the current, open air life, oxygen modified. Drugs are for the most part delusive palliators. Some bitter tonics, as hydrastis, alumin, nux vomica, prunes Virginiana, etc., may be used as adjuncts, and sub carb. bismuth, hydrocyanic acid diluted, deoscorein, etc., for painful manifestations. Cascara sagrada is the best laxative. Pepsin may be used temporarily and as a palliative.

Intestinal indigestion may require pancreatine or peptonized food.

Dysuria.—Hot bath, hot fomentations over the bladder, fl. ext. urtica dioica, corn silk, cantharides (in homœopathic doses).

Eczema.—Constitutionally, the oxygen treatment persistently carried out relieves a majority of inveterate cases. Locally, alkaline washes, tar and zinc ointment, *hot* local bathing (very hot), Turkish and Russian baths, tar ointment with 3 ss pulvis ararobæ to each 5 j. Try also oil of cade, green soap, glycerite of tar (for itching) borax benzoïn.

Emphysema.—The oxygen treatment relieves more effectually than any other. Jaborandi, lobelia, ether, quinia, camphor, iodide of potassium may be of service in appropriate cases.

Empyemia.—Oxygen treatment *very freely exhibited*, quinine, solutions of chlorine.

Epilepsy.—Constitutionally, the oxygen treatment has succeeded wonderfully with younger subjects, say under 18. Bromides of ammonium, sodium, and lithium, electricity (constant current), ether, amyl nitrite, open air life, nourishing diet, massage.

Epistaxis. — Hot water (douche),

spinal hot water bag; elevate the arm on the affected side; very hot applications to the forehead, compression, post-nasal plugging, styptics (powdered alum acts well).

Erysipelas. — Internally, tincture of iron and quinia (traditional repute); locally, a strong solution of *sulphite of sodium* on saturated cloths covered with oiled silk, proves an efficient germicide (?). Tincture of iodine with glycerine and carbolic acid also acts well. Nourishing diet, mild cathartics.

On the Treatment of Acute Rheumatism.

DR. W. R. THOMAS spoke thus before the British Medical Association:—

In practice, I generally find that we have at least three distinct varieties of rheumatism: 1. The sthenic. 2. The asthenic. 3. That variety caused and preceded by other diseases, as gonorrhœa, scarlet fever, etc.

The first kind I have generally found among the well-to-do classes; sometimes among the poorer. The patient, perhaps a commercial traveller or merchant, has always been exceedingly well, and until lately has enjoyed very good health. For some months he has suffered from dyspeptic and hepatic derangements; his urine has generally been very high colored, and a large amount of sediment has been noticed daily in it. He has complained of frequent headache, backache, and aching of limbs. He is florid, and probably very stout, and has found that he has not been able to go through the same amount of work as he formerly could. Evidently he has eaten and drunk more than his body has been able to use and burn up daily; and the several excreting organs, having had too much work thrown on them for a considerable time, are not now able to perform their functions properly.

I shall not deal with the pathology of rheumatism at all ; but in this patient there is a tendency to inflammation of certain tissues, and to the accompanying fever. He now sleeps in a damp bed, or catches cold in some way, and now comes on the attack. These are the cases where salicylic acid, salicylate of soda, and the bicarbonate of potash, are beneficial. Of the two, I am inclined to think that I have seen more benefit derived from the salicylate than from the bicarbonate ; but I frequently begin by giving the salicylates, and then go on with the potash. Attention to the little details we all find in rheumatism, as in all other complaints, of great importance ; for instance, covering the whole of the front of the chest with a layer of cotton wadding has often, I am sure, prevented an attack of pericarditis from coming on, and I have found a night shirt of very thin wool very useful, as these patients, perspiring much, are very apt to catch cold ; in fact, I now recommend all my rheumatic patients to wear it regularly, and many have been very thankful for the advice. With regard to the joints, I have found wrapping the affected bones in cotton-wool all that is, as a rule, necessary ; but when pain has been very excruciating, hot fomentations, with solution of belladonna sprinkled on the flannel next to the skin, have given relief. For pericarditis, my patients have generally seemed to be relieved by turpentine stupes, followed by linseed poultices ; but unless it seems to be severe, I think it is advisable not to take away the cotton wadding or to apply anything else, for I feel sure the less these patients are exposed the better. If possible, I avoid giving anything to procure sleep, but, when obliged to do so, I find our old friend Dover's powder the best. These patients generally require something to

act upon their chylopoietic viscera ; and I must say that I find nothing equal to five grains of pilula hydrargyri, followed by haustus albus, which draught has often to be repeated. As to diet, there is nothing better for them than milk ; and when the fever begins to subside, we can afford to be more generous.

The asthenic patient is thin, pale, and weak, to begin with, from some cause or other ; perhaps an over worked and over anxious young man, who in his desire to get on in the world has always neglected himself, and has taken his meals (and of them but little) irregularly ; or a young mother with one or two children, living on little else than tea. These patients have the same local signs and the same fever as the other patient had ; but although there is the same tendency to inflammation of certain tissues, and the same fever, the tendency has, I believe, been produced by different causes entirely ; and to obviate this tendency, or to remove the cause, we must, I think, adopt a very different mode of general treatment from what we do in the other class. These patients require plenty of support from the beginning, and we cannot give anything better than milk to begin with. Soon this patient will require beef tea and other foods. As an internal remedy, I think we have none to equal quinine, given from the beginning. Occasionally we may have to give other remedies when called for, but quinine is the remedy upon which we have to depend ; and later on, I invariably find that the addition of iron to the mixture is beneficial. The same local treatment is required in these cases as in the other. As aperients, colocynth and aloes are preferable to the mercurial and haustus albus.

My object in speaking to-day is to express my candid opinion that we should

not treat all cases alike, but first of all should take into consideration the class the of patient we have to treat, and then to decide what remedy or treatment to choose—in one case it may be potash or salicylate, in another quinine. Of course, the treatment of rheumatism following other diseases will be different, as such disease will have to be taken into consideration.

Chloroform Water.

DR. A. D. BUNDY, (*Ohio State Med. Reporter*):

In Vol. CXII. No. 4 of the *Boston Medical and Surgical Journal*, chloroform water (water saturated with chloroform) is treated editorially. The writer, in describing it, says that it was first formularized by Guillot, in 1844, and that afterward it was made the subject of a series of trials by Lasegne, Reynauld, and, more recently, by Beurmann. It is a stable preparation, easily prepared, and agreeable to the taste; and when diluted one-half with water, it is devoid of all piquancy and acidity. After reading and studying the above named article on the subject, I immediately prepared some and began its use, substituting it for syrups in cough mixtures, and using it in all solutions containing iron. Besides its other merits, it has marked analgesic power. It is an admirable remedy in nausea, vomiting, and gastralgia, and with morphia it is one of the most desirable of sedative cough mixtures. It is said to disguise almost entirely the taste of salicylate of soda, chloral, and bromide of potassium. I have used several gallons of it, and I am daily more pleased with it. For a long time I have been disgusted with syrupy mixtures (and I believe my patients have been also), and I shall use chloroform water in their place whenever I can.

To prepare it: take a half gallon bottle and nearly fill it with distilled water; then add three or four fluid drachms of Squibbs' chloroform; cork it tightly, and shake it every five minutes for an hour or so, and then set it to one side until the excess of chloroform has settled at the bottom of the bottle, where it can be seen in globules. It is some hours before the excess is well settled. Syphon or decant the solution, leaving the excess of chloroform. It is a beautiful, clear, and sparkling preparation. Below I give a small list of formulas in which I am using it with great satisfaction, also a small list from Beurmann:

R.—Morphia sulph. 1 grain; aqua chloroform, 4 fluid ounces. M.—Dose, a teaspoonful every hour in irritating coughs, also in nausea, gastralgia, etc.

R.—Tinct. ferri. mur., 4 fluid drams; acid phos. dil., 1 oz.; chloroform water, 6 oz. M.—Dose, a teaspoonful in half a wine glass of water before meals, as a tonic.

R.—Brom. potass., 2 drams; tinct. opii. camphor., 2 fluid drams; syrup tolu, 4 fluid drams; chloroform water, 1 fluid oz. M.—Dose, from $\frac{1}{4}$ to 1 teaspoonful in therapeutics of infancy.

R.—Salicylate of soda, 8 parts; syrup, 30 parts; peppermint water, 20 parts; *dilute chloroform water, 100 parts. Mix.—*Beurmann*.

R.—Chloroform water, 13 parts; peppermint water, 3 parts; water, 12 parts. M.—Dose, a tablespoonful for a calmative stomach potion.—*Beurmann*.

Diagnostic of Gout.

A pea like swelling may frequently be detected in the lobe of the ear, in the subjects of gout. It consists of a deposit of urate of soda, and is diagnostic of a hereditary tendency to the disease.—*Med. World*.

*Half water.

Diphtheria.

DR. W. F. PLANT, in a clinical lecture published in *Arch. Pédiatrics*, concludes as follows :—

Treatment.—The disease being both local and general, is to be met by a corresponding treatment. By local medication we try to limit the extent of false membrane, to promote its separation, and to prevent absorption.

The day of caustic applications, as strong solutions of nitrate of silver and hydrochloric acid, is happily over.

Among the most valued remedies are some of the styptic preparations of iron. These tend, by their astringency to lessen the size of the existing membrane and to prevent the spread of inflammation. With some older children I have used, with much satisfaction, a formula substantially that of the Catholic Foundling Asylum in New York city :

℞—Acidi carbolici, cryst., 00.4 grams ; liq. ferri persulph., fl. 12.0 grams ; M. glycerinæ, fl. 30.0 grams.

Signa. Apply with camel hair brush once in two or three hours.

The tincture of the chloride of iron, much diluted, may be used as a gargle ; but as few sick children can be prevailed on to gargle efficiently, and as iron is a good general as well as local remedy, we may secure its double action by giving it in frequent doses. If we combine chlorate of potassium and tincture of iron, a little free chlorine is liberated and this has a deodorizing and antiseptic effect on the exudation. This formula may serve you as a model :

℞.—Potassii chlor., 2 grams ; tinct. ferri chlor., fl. 6 grams ; glycerinæ, fl. 30 grams ; syrupi simp., fl. 30 grams ; M. aquæ ad., fl. 120 grams.

Signa. A teaspoonful every hour or two to a child of from three to five years.

If there is much fetor, it may be cor-

rected by the frequent application of either of these solutions :

℞.—Sol. sodii chlorinæ, fl. 10 grams ; aquæ ad. fl. 240 grms. M. ℞. Potassii permanganat, 1 gram ; aquæ, 240 grms. M.

Of late, alkalies have been much resorted to as solvents of the exudate. If you soak a fragment of the expectorated membrane in lime water at blood heat, it soon breaks down into a "granula putrilage." The same effects attend maceration in solutions of the salts of sodium and potassium and some other agents as lactic acid and trypsin. The best way of applying these remedies is by the hand and steam atomizer. I am partial to the latter, and like to use it in every case in which the child is old enough and tractable enough to second my efforts. Nothing is so agreeable to the throat as the warm vapor. That of itself tends to soften the membrane and loosen its attachments. The steam from lime water is equally comfortable, and is, possibly, superior as a solvent. Professor J. Lewis Smith recommends a two per cent. solution of liquor potassium with lime water, as a more effective solvent than aqua calcis alone. It is good practice to add a drop or two of carbolici acid to the cup of atomizing fluid. I would repeat this treatment every two hours through the day, giving, at least, five minutes to a sitting. It is to be regretted that many children are too young or too perverse to use the atomizer, and that some resist with all their might any medication of the throat. It is a question whether in such cases the harmful effects of the emotional excitement and loss of strength do not overbalance any good to be secured by enforced local treatment. Fortunately we are not wholly without resource. A tent is easily raised over the cot, a croup-kettle set going, and then, *nolens volens*, the patient breathes steam.

When the nostrils are involved, local treatment is even more imperative on account of the greater danger of auto-infection and death from septicemia. Some cleansing fluid should be used often—every hour or two—with the nasal syringe. A dilute solution of permanganate of potassium, of Condyl's fluid or of carbolic acid may be employed.

To swollen and painful cervical glands, hot fomentations, as flannels wrung from hot water and vinegar, do much for the comfort of the sufferer.

When the breathing is interfered with by swelling of the throat, an emetic of alum or of ipecac gives relief.

General Treatment.—The paramount object of the constitutional treatment is to keep the patient alive until the disease has spent its force. First in importance is the nourishment. For children nothing equals milk and plenty of it. Meat broths, custards, buttermilk and ice cream are also in order. The latter is peculiarly grateful when there is great pain and heat of the pharynx. If the patient cannot swallow, rectal alimentation should be resorted to.

Among the general remedies, alcohol should, I think, take rank. Some of the lighter cases may do well without it, but in the severer ones it should be given as a main reliance. Many writers allude to the remarkable tolerance of alcohol in this disease. Quantities that in health would cause profound intoxication are frequently taken without the least apparent effect on the sensorium. Infants of two years may take from ten drops to two teaspoonfuls of whisky, or its equivalent of other liquor, once in two or three hours. I usually prescribe it in the form of milk punch. If more agreeable it may be diluted with water and sweetened. Some of your books advise stimulants if the heart flags and death by syncope is threatened. But I would not wait for

that. When at all severe, diphtheria is certain to induce debility and a tendency to sudden prostration. It is sensible and safe practice to attempt to forestall these effects by an *early* employment of the most sustaining measures. Begin treatment with a moderate use of stimulants, and if, later, there is septicemia or syncope, or a very slow, or a very frequent pulse, you may boldly push them without fear of harm. If, in spite of this course, there are evidences of cardiac weakness, keep the patient constantly in bed without pillows.

I have already spoken of iron as a general remedy. I employ it in every case substantially after the formula above given. After the throat is well, iron is still a chief reliance in securing favorable convalescence from debility and anemia. At this stage it may be given with less frequency. Quinia, and its associate alkaloids, are also valuable remedies in diphtheria. They may be combined with the tincture of iron, though I seldom give these very bitter solutions to children. The taste of the cinchona alkaloids may be pretty well masked by combining with the powders or fluid extract of licorice, with syrup of chocolate or with coffee.

Diphtheritic paralysis would undoubtedly be recovered from in most instances without treatment. Recovery from it is apt to occur rather suddenly after a duration of three or four weeks. If it should be delayed, the usual remedies—strychnia, electricity, the chalybeates, with change of air—should be tried. If the palsy involves the limbs or the trunk, benefit will accrue from a daily massage.

If hemorrhage takes place from a surface that can be reached, resort to local styptics.

R_x—Sol. ferri persulph, 1 part; glycerinæ, 3 parts. M. Apply with a camel hair brush.

If the bleeding point is in the nose, beyond the reach of the brush, use the nasal syringe with some such solution as this: $\mathcal{R}$ —Sol. ferri. persulph, 1 part; glycerinæ, 1 part; aquæ, 6 parts.

Alcohol Incompatible with Chloral Hydrate.

GEO. F. H. MARKOE states that he has found by careful experimentation that when alcoholic preparations are combined with hydrate of chloral, especially in connection with the bromides of potassium and sodium, a separation is likely to occur in the mixture, the chloral separating as an alcoholate, and floating on the surface, thus causing danger of giving an overdose.—*Am. Jour. of Pharm.*

Gilliford's Solution Bromide of Arsenic.

$\mathcal{R}$. Arsenious acid, gr. 60; carbonate of potassium, gr. 60; bromine, fl. dr. 2; water, qs. The carbonate of potassium and arsenious acid, with four ounces of water, are made into a solution by aid of heat; when cold, the solution is made up to twenty ounces, and to this the bromine is added.—*Pharmaceutical Record*.

DISEASES OF THE NERVOUS SYSTEM.

The Importance of Shampooing and Gymnastic Exercise in the Treatment of Epilepsy.

DR. JOHN KENT SPENDER, Physician to the Mineral Water Hospital, Bath, says in the *Brit. Med. Jl.*, May 2, 1885:—Whatever may be the healing virtue of "rest" in a surgical sense, there are diseases in the treatment of which too much bodily rest and too much sleep may be medically injurious; that is to say, they are injurious in adding to the lethargic dulness which is the natural sequel of certain morbid processes; so that our duty as physicians lies in coun-

teracting, by outward means, the depressing effects of internal and invisible forces. I do not wish to say that drugs have been too highly estimated in treating epilepsy; their effects are more striking than in the treatment of other diseases, and are one of the approximate certainties of medical art; but other remedial agencies have been valued too little. It may be proper to think of drugs first; but long ago Dr. Russell Reynolds recommended "wholesome mental exercise," and I wish now to add a plea on behalf of wholesome bodily exercise as well. Bodily exercise means bodily education, or the training of the muscles into stronger and more harmonious action; and by soothing and regulating the motor nerves, all the disorderly phenomena of epilepsy may be brought into comparative subjection and quietness.

Among the useful hints which have been offered by Dr. Radcliffe on this subject, he has warned us that the "sleepy epileptic" must be roused early and made to leave his bed. Similarly the stupid and idle epileptic must be summoned to his martial drill, and his senses kept "alive" by stir and movement. But even when the faculties are acute and femininely sensitive, the stultifying effects of the long continued epileptic convulsion may be appropriately met by gymnastic exercises and systematic shampooing of the whole body. In February, 1884, Dr. Radcliffe kindly entrusted to my care an epileptic lady of middle age, refined in manner, but almost emaciated in form, and the mother of two healthy and happy young children. Medicines of a special kind had been administered, including cod-liver oil; but, during the last few months, the steady improvement has been materially quickened by the following plan of action. The body is sponged with hot

water every day ; the arms are moved up and down frequently (this expands the narrow chest), and clubs of moderate weight are raised with the hands. Walking in the open air has been encouraged on all possible days. Once a week, a professional shampooer comes and carries out a complete massage of the whole body. Two epileptic girls, children of farmers in a neighboring county, have rapidly improved under similar management.

What I have now written is probably quite familiar to experts in neurology ; but Trousseau says nothing about it, and, in the best English monographs, the hygienic treatment of epilepsy receives scanty recognition. Assuming that a rational scheme of medication is adopted in any given case, I claim that regular shampooing and gymnastic exercises may greatly help our therapeutic work, and sometimes make all the difference between success and comparative failure.

DISEASES OF THE URINARY ORGANS.

The Treatment of Cystitis.

Dr. FLOYD CLENDENEN, of La Salle, Ill., writes to the *Therapeutic Gazette* as follows :

During the last few years I have had a number of cases of cystitis on my hands in which I have used the following prescription with the greatest success :

Tr. elaterium, $\mathfrak{z}$ i to $\mathfrak{z}$ ii ; fld. ext. belladonna, gtt. xv to xxx ; water, q. s. ad $\mathfrak{f}$ $\mathfrak{z}$ iv. M. S.—Teaspoonful every two or three hours.

With this treatment is usually combined a tea made from watermelon seed or elm bark. My failures with this treatment have been very few. In a few instances, where the case seemed somewhat rebellious, I have given the elate-

rium strong enough to get the cathartic effect of the drug. The specimen of elaterium from which the tincture is made should be perfectly pure, or the results cannot be depended upon. The way that I prepare the tincture is to exhaust 1 grain of elaterium in an ounce of pure alcohol, to which 4 drops of nitric acid have been added.—*North-western Lancel.*

Treatment of Diabetes Mellitus.

Dr. DORNFLUTH gives the following results of experiments in six fair patients :

The diet was strictly limited to meat, eggs, soup, and coffee without milk. The only drink allowed was seltzer, with a little red wine. Occasionally some other food was given, but no leguminous vegetables. Moderate exercise was enjoined. The remedies tested were salicylate of soda, iodoform, carbolic acid, and salicin.

Iodoform was not found to influence the excretion of sugar in any way. The others were each effectual in reducing the amount of sugar, and in compensating for the ill effects of a return to amylaceous food up to a certain point, and also in either improving the general health or checking its progressive decline. None of the cases, however, were cured, all being far advanced when coming under observation.

Carbolic acid was condemned for its bad effects on the system in the large doses required to effect the excretion of sugar. Salicylic acid causes headache, aural symptoms, and is badly borne by the stomach.

Salicin was equally—sometimes even more efficient as a remedy, and had no injurious or troublesome effects. The largest doses found necessary (eight grammes per dose, eighteen grammes per day) were taken without any detriment.

Serious objections may be urged against the purely dietetic treatment of diabetes. It is not long tolerated by the patient; exposes him to the grave danger of acetonæmia; is expensive, and difficult to enforce on the patient, who is sure to be discontented; and, finally, is at best but a palliative, not aiming at a curative result. Salicin should be given in three to six gramme doses, half an hour before each meal. When no more sugar can be detected in the urine, we may allow one meal of amylaceous food daily, increasing the dose of salicin.—*Phila. Med. Times.*

DIGESTIVE TRACT.

Treatment of Gastric Affections.

That muriatic acid has a beneficial effect in many cases where gastric digestion is disturbed, is a fact generally appreciated. Dr. S. Talma (*Ztsch. f. klin. Med.*, viii., p. 407), has recently investigated the action of this acid in cases of dyspepsia depending upon abnormal fermentation. He recommends to administer the acid only so much diluted as it is met with in the normal gastric juice, viz., 1 part to 750 of water, and to use at least sixteen minims of it (the undiluted acid) during twenty-four hours. T., however, mentions that there are some cases where apparently an abnormal decomposition of the contents of the stomach exists; the patients—generally nervous women—complain of acidity and gastralgia, sometimes of a severe character, after meals. In these cases the muriatic acid is not only without effect, but it even does harm, while an alkaline treatment at once improves the morbid symptoms. The mucous membrane of the stomach seems to be very sensitive to the influence of muriatic acid. Whenever dyspepsia appears in connection with cerebral anæmia, or

when the former seems to be the direct consequence of the latter, nitro-glycerin has been found by Talma to have a very beneficial effect. He administered this powerful drug three times daily—immediately after the main meals—in the dose of one-third of a milligram = $\frac{1}{180}$ grain each.

We cannot see how a treatment can be successful which is not directed against the main causing element. When cerebral anæmia is present, the dyspepsia is directly produced by it, and nitro-glycerin, at best, can only have a palliative effect by inducing a transient increase of flow of arterial blood to the brain. The object of the treatment in such cases should be the removal of the cerebral anæmia; if this can be achieved, the gastric symptoms will cease by themselves.—*Med. & Surg. Rep.*

Local Application of Cascara Sagrada in Constipation.

H. C. GLANVILLE (*London Lancet*), in alluding to the fluid extract of cascara sagrada, which he considers the most reliable preparation, says: It acts upon the hepatic secretions and circulations, the whole gastro-intestinal canal, stimulating its morbid condition and the neighboring glands to healthy action. As a cholagogue it is invaluable. In chronic constipation its action is good, producing full, easy, pleasant stools, without any tormina, tenesmus, or nausea. The liquid extract, combined with the tincture of iodine painted on the hypogastric region daily, until the bowels are moved easily, has given the same result after repeated trials on patients suffering from habitual constipation. As a remedy for dyspepsia it is superior to many others of its class, being pleasant to take and producing no nausea.—*Analectic.*

DISEASES OF RESPIRATORY ORGANS.

Treatment of Ordinary Marked Sthenic Pneumonia (Croupous).

Do not bleed, as a rule, though in a strong man with strong pulse you will relieve the headache and dyspnœa in the early stage. In later stage a few wet cups, in the same condition, will be of much avail. Keep down the circulation at any rate, by one of two remedies, to wit: Tinct. aconite, ℥j—ij, in diaphoretic mixture, every two hours, or tinct. veratrum viride ℥iij—v, in syrup of ginger, until an impression is produced on the pulse. In conjunction, quinine, gr. viii—xij per diem, will be found beneficial.

As the case goes on, and the circulation is to be further controlled, the use of digitalis is indicated. Act on the secretions and keep them up; keep patient quiet. Give him Dover's powder at night.

Quinine is to be given throughout the course of the disease. In the second stage expectorants are valueless, but may be used later, when tissue breaks down, etc. Then use ammonium chloride or ammonium carbonate. The latter is also astimulant to the circulation, and also breaks up exudation. Give it in doses of gr. v—vij, every two or three hours. The aromatic spirits of ammonia may be substituted for it, in doses of f. 3 ss, given in simple elixir.

Plain food should be given; oysters or fluid food. We may give him almost what he wants. Stimulus is required for the symptoms, but not for the disease; *i. e.*, a flagging pulse, a weak heart, call for whisky. In this state of affairs give f 3 ss every two or three hours. If the case passes into the stage of general exhaustion give whisky freely.

In typhoid pneumonia give ammon-

ium carbonate, quinine, digitalis and stimulus from the very onset.

Local Treatment.—If some pleurisy exists, poultice, but cease when pain stops; glycerine for circumscribed pleurisy and lingering consolidation.

Capillary Bronchitis.

Professor N. S. DAVIS, recommends: R. Ammonii chloridi, 3 ij.; antimonii et potassii tart, gr. ij.; morphia sulphatis, gr. iij.; ext. glycirrhizæ, fl. 3 j. syrupi, 3 iij. M. Sig.—One teaspoonful every three or four hours.

Chronic Bronchitis.

Professor DA COSTA has obtained good results from the use of chlorate of potash in chronic bronchitis, when the expectoration is scanty and tenacious. In these cases he frequently orders—

R. Potassii chloratis, 3 j.; ammonii chloridi, 3 ij.; tinct. hyoscyami, 3 ss.; Syr. pruni virginianæ, 3 iijss. M. Sig.—Two teaspoonsfuls three times daily.

The Hygiene of Chronic Bronchitis.

DR. J. MILNER FOTHERGILL thus concludes a paper in the *Med. Record*, August 29:—There are some points about the clothes and hygiene of chronic bronchitis worthy of mention. They are a chilly race, from impaired oxygenation and defective heat production. They are scant of breath, and cannot get about. They must be warmly clad; yet the ycan-not bear any weight of clothes. Consequently their clothes must be light as well as warm. Furs in the day time out of doors; down bed quilts for the night. Warm underclothing in the day, and a flannel night gown. On cold nights, a fire in the bed room is good. A respirator is invaluable for preventing fresh attacks of cold. Fifteen years' experience

of a respirator has told me its value and entitles me to speak. Never mind its unsightliness; or the remarks it may provoke on the part of the thoughtless, or even the sympathy of others. Like the gloves, it should always accompany hat and stick. If it had not been for a respirator, the writer would have been a puny, broken down bronchitic, instead of a well and fairly preserved man approaching middle age.

Then, again, remember the position of the liver. Pushed out of its warm nook, thrust down so that much of it is only covered by the thin abdominal parietes, it is liable to chills. Consequently a cummerbund, or broad belt of several thicknesses of flannel, is most desirable. This protects both the liver and the kidneys. Specially is this last matter of moment where there is a gouty element in the case—a very common complication. The food should not be too highly albuminous; and the patient ought to be encouraged to take fat as far as possible in any and every form.

By such measures the chronic bronchitic may live on for years—practically on sufferance, *i. e.*, by taking proper care, death being the result of neglect or forgetfulness.

How to Relieve Asthma.

DR. Q. C. SMITH, of Austin, Texas, writes as follows to *Guillard's Medical Journal*:—

To relieve those desperate paroxysms of asthma that threaten life every moment until relieved, I am accustomed to administer hypodermically the following:

℞.—Mur pilocarpine. apomorphiæ each, gr. one-eighth.

The patient will quickly sweat profusely, breath easier, and obtain sleep within ten minutes.

To establish the work begun, proper

constitutional treatment should be promptly instituted and perseveringly carried out in every case, for weeks at least.

For many cases the following is a favorite combination with us as a constitutional remedy:

℞. Iodide sodium, 3i; fl. ext. grindelia robusta; tinct. aloes, syr. ipecac, each. 3ii; Fowler's solution, 3ss; fl. ext. belladonna, gtt. iv; syr. lactucarium (Aubergiers) q. s. ft. ʒii; M. ft. sol.; S. Teaspoonful every three hours for one day, then three times a day just after meals, for from three to six weeks.

Nasal Catarrh.

Nasal catarrh is both acute and chronic. In the acute form it is frequently ushered in with slight chilly sensations, slight headache above one or both eyes, frequent sneezing, the mucous membrane of the nerves becomes red and swollen, and there is a glary white mucous discharge from the nostrils. The appetite is indifferent, bowels costive, and the patient is unable to perform manual labor. Have treated hundreds of cases in all its various forms and stages, tried all kinds of remedies and instruments, and have settled upon the following course of treatment: ℞. Arsenici iodidi, gr. viij.; aquæ dest., Oj. M.—Sig.: take a teaspoonful 3 times a day. Continue remedy for months, in either acute or chronic form. Also: ℞. Potass permanganas, gr. iv.; aquæ dest., ʒiv. M.—Sig.: pour a small quantity in the palm of the hand and snuff up each nostril sufficiently hard so that the solution will run through the nostrils and reach the pharynx; repeat night and morning. This treatment cures a large majority of cases of nasal catarrh speedily and permanently.—*Medical World.*

CONSTITUTIONAL DISEASES.

Danger of Neglecting, and the Best Means of Controlling the Febrile State.

DR. ANDERSON, in an article, of which we abstract a portion, published in the *Edin. Med. Review*, says :

As regards so-called antipyretic medicines, time will only permit of my referring to four—(1.) Salicine and the Salicylates, (2.) Quinine, (3) Kairin, and (4.) Antipyrin.

Salicine and the salicylates have been much vaunted of late as antipyretics. Thus Dr. Lauder Brunton says of salicine, "It is an antipyretic ;" and of salicylic acid, "It is a most powerful agent in lowering the temperature in fever." Now, everyone will admit that, in cases of rheumatic fever, these drugs generally speedily bring temp. to normal ; but why? Not because they act upon the heat centre, but because they remove the rheumatism which is the cause of the fever. As a matter of fact, they cut short the febrile movement just as the surgeon's knife does when he opens an acute abscess and gives free exit to the pent up pus.

But further you will sometimes find that even although salicine puts a stop to the pain and swelling of the joints, it does not of necessity control the fever.

In a paper by Dr. Holland, of St. Moritz, [*v. Med. Abs.*, p. 217] giving cases of phthisis treated by antipyrin, I find that in six of them salicylate soda was tried, and in not a single case was temp. lowered in the least. To tell the truth, I have no faith in the salicylates as antipyretics except to the extent already indicated.

But, while sceptical as to the antipyretic virtues of the salicylates, I have formed a very different opinion with regard to quinine, if given in large doses

(10 to 40 grains in a single dose, or in divided doses within an hour). In fact we must, as Leibermeister has remarked, give such a dose as will bring down the temp. for a time to normal, on the principle that an extremely violent fever, which has occasional intermissions, is much less dangerous than a less violent fever which is continuous, or only shows slight remissions.

Kairin is an artificial alkaloid recently built up synthetically by Dr. Otto Fischer, of Munich, and is described as being the hydrochlorate of oxy-chinilin-ethyl. This (and other similar bodies) was handed over to Dr. Filehne for examination in 1881, who found it a most powerful antipyretic. The dose is 8 to 16 grains every hour until temp. is reduced nearly to normal, and generally three hourly doses are sufficient. As temp. falls pulse and resp. become slower, and there is generally profuse sweating, which, however, ceases when temp. is normal. The sweating may usually be prevented by administering an anti-sudorific about a quarter hour before the medicine is commenced, such as pilule of agaricin (gr. $\frac{1}{20}$) (Riegel), or (gr. $\frac{1}{100}$) of atropia. As temp. falls patient feels more comfortable, and there is never any really bad symptom unless the drug is impure, in which case cyanosis and collapse have been known to result. But within 12 hours of the commencement of the kairin the urine becomes greenish, and this continues for about 24 hours after it is stopped. When the influence of the kairin is exhausted, which occurs generally in from two to three hours, according to dose, temp. rises and then the patient experiences a feeling of chilliness, and even a severe rigor is far from uncommon.

Antipyrin is a synthetic alkaloid belonging to the group of chinilin derivatives, for which we are indebted to Dr.

Knorr, of Erlangen. The dose is from 15 to 30 grains, and the first effect is a dilatation of the cutaneous vessels, which is soon followed by a fall of temp., accompanied by sweating. The normal temp. is not influenced by it, but where fever is present three hourly doses of 30 grains generally bring it down to or below normal.

My experience of antipyrin is not so great as that of kairin, but while both medicines must be regarded in the light of very certain antipyretics, my present feeling is in favor of antipyrin. It is comparatively devoid of taste, is readily soluble in water (1 in 3 in the cold), so that it may be administered subcutaneously, and it does not discolor the urine. It not only lowers temp. with at least as much certainty as kairin, but is as a rule more permanent in its effects; the latter too often produces vomiting, headache, and epistaxis, and when temp. begins to rise a rigor very frequently ensues.

Quite recently Mingazzini has tried the two medicines in combination, and his experience is that in this way a more marked and more permanent fall of temp. takes place than when either is given separately; and, further, that when kairin is given along with antipyrin, the former does not give rise to the inconveniences which are apt to ensue when it is given alone.

Such are the measures which in my experience are capable of fulfilling the object in view—that of combating the element of fever, when, from its intensity, or from its long continuance, it threatens the safety of the patient.—*Edinburgh Medical Journal.*

The Treatment of Typhoid Fever.

DR. G. T. McKEOUGH, (*Can. Lancet*).
When a case is presented for treatment and reveals symptoms which would lead

us to suspect that typhoid fever is developing, immediate confinement to bed is advised, in a capacious well-ventilated room. If the suspicions prove correct and typical symptoms unfold themselves, absolute rest in bed is ordered in the horizontal position, with occasional shiftings from side to side, to avoid fatigue, hypostatic congestion of lungs and kidneys, and any tendency to bed sores. This necessitates the constant use when required, of the bed-pan and urinal. A rigid adherence to these simple directions is strictly enforced in all cases, mild as well as severe, from the commencement of the treatment until convalescence is thoroughly established. The surroundings of the patient are carefully examined into, and endeavors made to exclude fresh accessions of poison, by the removal of any possible source of contagium.

If the sanitary conditions and arrangements of the place are very bad and facilities for transferring the patient are more easily carried out than the removal of the filth, the former procedure has been resorted to. Thorough ventilation is maintained constantly, day and night; in most cases it is advisable, perhaps, not to allow direct drafts, but where there is any tendency to hyperpyrexia, drafts, if the temperature of the patient is carefully watched, need not be dreaded; placing the patient without covering, even in winter weather, between two open windows has had decided beneficial effects in lowering the fever, and thus allaying distressing symptoms the result of a high temperature. Positive quiet is maintained. No visitors are allowed admittance into the sick room, and it is advisable and important that the nurse be not officious or talkative, but an intelligent person, who will carry out instructions carefully and judiciously.

ously. The walls of the sick room are bared and unnecessary articles of furniture removed. Strict attention is given to the cleanliness of the patient, sheets are removed and clean ones replaced daily. The stools are passed into a bed-pan, into which some disinfectant has been placed, and immediately removed and buried some safe distance from any habitation. Water is allowed *ad libitum*. The patient's diet is certainly one of the most important factors in the successful treatment of typhoid fever. It is essential that it should be liquid, that the weakened digestive powers may not be overtaxed, and that any source of irritation to the bowels may be avoided. As soon as the disease is suspected, with the advice "to go to bed," the patient is restricted to liquid food. In the great majority of our cases milk, to the amount of a quart given regularly in divided quantities, every twenty-four hours, is our mainstay. In some cases more can be given with impunity and without unfavorable symptoms arising. In this relation, I might say that we either examine personally the stools, or carefully inquire as to their general character and to the presence of curds in them. In others milk will not agree, or can only be given in moderate quantities. Some who object to milk will relish buttermilk; in others, still, we have to depend upon animal broths, beef peptonoids, etc. The latter preparation, in conjunction with peptonized milk, we have used of late with great satisfaction, especially if curds are found in the stools, or if there are marked abdominal symptoms. In this way the digestive powers are conserved, diarrhœa—if that exists—is lessened, less solid matter is left to undergo decomposition, and probably fever is lowered. For what is more common after an enema, which has brought away

a quantity of offensive partially digested material from the bowels, than to see a restless patient with an elevated temperature, fall into a quiet slumber and his temperature drop several degrees.

Diarrhœa has not been a very troublesome symptom in the greater number of our cases; this may be due in part to the care bestowed upon the patient's diet. If there are not more than four or five alvine passages in twenty-four hours, no heed is paid to this symptom. If the discharges are more frequent and exhausting, they are checked by enemas of starch emulsion, half a tea-cupful, as often as necessary. If this fails, a small quantity of Tr. opium is added to the emulsion. If the bowels instead of being relaxed are constipated, enemas of salt and water or thin gruel are administered daily. When deep ulceration is suspected, a small injection is given on alternate days only. When hard fæcal masses accumulate in the rectum and an ordinary injection fails to produce the desired effect, a quarter of an ounce of inspissated ox gall dissolved in a cup of warm water, will produce a speedy evacuation, giving a great relief. The non-administration of laxatives in any form is a *sine qua non* with us. When the stools are offensive, or there is much detension of the abdomen, charcoal is given in teaspoonful doses, mixed with cream, twice or three times a day; or, if this form of administration prove objectionable, it may be given in large capsules. From our experience with charcoal in this disease when its need is indicated, we have always found it a most valuable and satisfactory remedy, by checking fermentation, limiting perhaps the multiplication of disease germs and maintaining an antiseptic action. The offensive character of the stools is corrected, abdominal distension abated and the tempera-

ture reduced. The cases in which obstruction of the bowels have been caused by its accumulation must be rare.

When hæmorrhage from the bowels occur, the strictest quiet in the recumbent posture is preserved, the food is limited to concentrated material that leaves but little solid residue, such as Liebig's Extract or beef peptonoids. Ice is given by the mouth, an ice-bag is applied to the abdomen and a mixture of gallic acid and Tr. opium is administered. The latter prescription we invariably have at the bed-side of the patient in all cases after the second week, to be given if necessary, and we think life has been saved by this precaution, as some valuable time must elapse before a physician could be summoned. Directions are left for the preparation to be given immediately; although the "*vis medicatrix naturæ*" probably controls the majority of hæmorrhages from the bowels, it is well in the face of such a formidable symptom, to assist her and that right quickly.

Regarding the antipyretic part of our treatment, quinine is given freely in many cases in the early stage of the disease. The district in which we practice is malarious and as a positive diagnosis is not always possible, the patient is given the benefit of the doubt and quinine is administered. When the diagnosis is made, quinine is discarded, except in a few cases in which our usual method of reducing temperature is not applicable or objected to, when large doses are administered in the manner recommended by Wilson of Philadelphia, after the evening exacerbation has reached its height. The bath treatment was resorted to only in a few cases in which the fever ran high, the prevailing prejudice against it and its impracticableness in most houses prevents its general use; how-

ever, when it was applied, the results were excellent. But in the great number of cases the temperature was controlled by the systematic and regular use of iced whiskey or iced water and whiskey, the whiskey overcoming the popular prejudice of taking cold, applied to the outer surface of the body with a sponge; the use of a fan at the same time will greatly assist in the reduction of the temperature. By these means we have never failed to keep the temperature in the mouth or rectum ranging from 100° to 102° F. It is often necessary to prolong the sponging process and sometimes resort to it very frequently, but the benefit derived fully recompenses the trouble, irksome as it sometimes proves to the nurse. It is perhaps needless to state here that it is necessary that the attendant be properly instructed in the use of the thermometer.

The disturbances of the nervous system are often peculiarly trying. The headache and delirium of the first week may be alleviated by cold applications, the menthol point, cutting the hair, or if very distressing, the use of the bromides and chloral hydrate. Insomnia and its resultants—typhomania and coma vigil—may often be prevented by controlling the temperature from the first; but if these symptoms should supervene, alcohol, hydrate of chloral or opium may be required, for a fair amount of sleep must be secured in all cases. Alcohol we use only when failure of heart is threatened, or to increase nerve energy, as indicated by tremor or delirium. And in those cases where the surface of the body is pale, the tongue dry and brown, with sordes, alcohol, by paralyzing the vasomotor system in the periphery of the body overcomes this condition, relieves pressure in the internal organs, and does great good thereby.

The only medicine that we use routinely is nitro-muriatic acid, well diluted, given because it is usually well borne by the stomach, aids the digestive process and favors the assimilation of food. Whether it has any specific antiseptic action or not is yet an unsettled question. I might add, in conclusion, that frequent examinations of the urine and lungs are important, as albuminuria and pneumonia, which sometimes complicate typhoid fever, might be overlooked at their invasion, unless searched for.

Abortive Treatment of Typhoid Fever.

In the *New York Medical Journal*, appeared a paper on typhoid fever, by Dr. EDWIN R. MAXSON, in which the author advocates what he calls an abortive treatment of this disease.

The indications for treatment, he says, are "to destroy or neutralize the poison in the blood; unload the liver; call the skin into action, thus reducing animal heat; to call the circulation to the extremities; to sustain the powers of the system; to subdue abdominal, thoracic and other irritations, and especially gastro-intestinal; to suitably nourish, and to keep the patient properly encouraged." He claims to have succeeded in nearly every case during the last ten years in meeting these indications and arresting the course of the fever within one week.

To destroy the poison in the blood he gives to an adult four grains of the sulpho-carbolate of sodium every six hours—at six, twelve, and six o'clock—dissolved in a teaspoonful of water. As an additional antiseptic, and to support the powers of the system, he gives two grains of cinchonidine with ten drops of tincture of the chloride of iron every six hours, alternating with the sulpho-carbolate, in four ounces of warm crust

coffee without milk; and he orders the continuance of these remedies for a week after discontinuing attendance upon the case.

To unload the liver he gives one improved C. C. pill at first, and one daily if constipation is present; but otherwise a one grain pill of leptandrin daily until the tongue clears off, and afterwards one or the other only as may be indicated by constipation.

To equalize the circulation and stimulate the action of the skin, and thereby reduce the temperature, a warm foot bath is used morning and evening until the fever is arrested, the skin becomes soft and the temperature normal. This he states will ordinarily occur in three days by the aid of warm drinks, required for nourishment, and strict avoidance of everything cold internally and externally.

In rare cases where the headache continues in spite of such treatment, a teaspoonful of blood is taken by cups from the back of the neck or blisters are applied back of the ears or to the back of the neck.

To subdue irritation of the thoracic or abdominal viscera, he applies daily, morning and evening, from the onset of the disease, warm sinapisms over the whole chest and abdomen, taking care not to blister but to produce decided reddening of the skin. He continues these until all the symptoms of the disease have disappeared.

No cold drinks are allowed. He gives only warm "crust coffee," one-half milk, for drink and nourishment, thus favoring perspiration. Plain, nourishing food at regular meal times only is given, when tolerated, with tea if desired.

The patient is encouraged to keep dressed and out of bed in the day time, reclining on a couch or in an easy chair at will.

This constitutes what Dr. Maxon calls his abortive treatment. If from any cause, such as neglect, or unhygienic surroundings, the disease continues more than a week, he would treat any inflammations which may have arisen by means of cups, blisters, etc., and the gastro-intestinal disease especially by blisters to the epigastrium and abdomen if necessary. The only addition to treatment already outlined—except to meet emergencies, as diarrhea, hemorrhage, etc.—would be to give eight drops of turpentine in emulsion, as an alternative for the gastro-intestinal disease, and two drops of the tincture of nux vomica with the sulpho-carbolate, as a tonic for the digestive organs and nervous system.

The Latent Anæmia of Typhoid Fever.

DR. FREDERICK P. HENRY, of Philadelphia, has made a number of microscopic examinations of the blood during and after typhoid fever, and finds that while the number of red corpuscles is fully up to or above the normal standard during the fever, during convalescence it often sinks considerably below the number found in health. This he explains as a latent anæmia, the loss of water from the blood during the disease causing a relative increase in the number of red corpuscles. This view leads him to the belief that typhoid fever patients should take water as a medicine as well as to relieve their thirst. He quotes the late Dr. John F. Meigs, of Philadelphia, who expressed similar views in one of his lectures at Pennsylvania Hospital in 1880.—*Polyclinic*.

Strychnia in Malarial Fevers.

DR. D. COLVIN, writing to the *Med. and Surg. Reporter*, says: I use the following formula, almost invariably, with very satisfactory results:

℞. Strychniæ sulphat. gr. ss.; ext. quassiæ, grs. xx. Mix.—Make mass and divide into ten pills. Take one before each meal.

In an anæmic condition, as one of the sequelæ of frequent chills and fever, and immediately after their arrest, I used, with great satisfaction, the following:

℞. Strychniæ, grs. ij.; ferri sulph., grs. l.; arsenious acid, grs. jss.; ext. quassiæ, grs. c. Mix—Make mass and divide into fifty pills. Take one half an hour after each meal.

The latter is the best formula I have ever known in what is *termed*, by some, chronic malaria.

Warburg's Tincture.

The following is said to be Dr. WARBURG'S own formula, first published in 1875:

Take of—Socotrine aloes, 1 lb.; rhubarb (East Indian), 4 oz.; angelica seed, 4 oz.; confect. of damocratis, 4 oz.; saffron, 2 oz.; fennel seed, 2 oz.; prepared chalk, 2 oz.; gentian, 1 oz.; zodia, 1 oz.; cubeb, 1 oz.; myrrh, 1 oz.; camphor, 1 oz.; white agaric, 1 oz. Mix.

These ingredients are to be digested with five hundred ounces of proof spirit in a water-bath for twelve hours, then expressed, and ten ounces of quinine sulphate added, the mixture to be replaced in the water-bath till all the quinine is dissolved. The liquor when cool, is to be filtered, and is then fit for use.

Favorite Prescriptions.

DR. E. J. KEMPF (*The Louisville Medical News*):—

If pulling teeth is a part of your professional duties, try the following local anesthetic: ℞. Po. G. camphor, 3j; sulphuric ether, f. 3vj; tr. cannabis indica, f. 3ij. M. Fasten some ab-

sorbent cotton to the point of a soft stick, moisten with the anesthetic, and rub the gums around the tooth to be pulled.

If you ever get a case of rectal worms, which nothing else will relieve, try this : $\mathcal{R}$. Po. Cape aloes, $\mathfrak{z}$ j; barley water, Oj. M. Inject half at night and the other half in the morning, after the bowels have been cleansed with a cathartic.

In a case of cholera morbus, try this: $\mathcal{R}$. Bismuth subnit., $\mathfrak{z}$ j; pepsin, $\mathfrak{D}$ j; oxide zinc, gr. viij; morphine, gr. ij; cinnamon water, f. $\mathfrak{z}$ ij. M. Give a teaspoonful every hour until the urgent symptoms are relieved, then slacken the dose.

As an infant's opiate, try: $\mathcal{R}$. Dover's powder, gr. j; sugar of milk, gr. cxx. M. ft. pulv. 5. Give one in milk or cream.

To poultice orchitis or mastitis, take one pound or more of crushed crackers, soften them with hot water, or, better, steam them till soft, sprinkle with a half dram to one dram of powdered opium.

To stop the flow of milk, try: $\mathcal{R}$. Atropine, gr. iv; water, f. $\mathfrak{z}$ iv; glycerine, f. $\mathfrak{z}$ ij. M. Soak pledgets of lint in the lotion and apply them to the breasts. Constitutional symptoms from the atropine must be watched.

A good sinapism that can be put into your saddlebags, make thus: $\mathcal{R}$. Oil mustard, essential, f. $\mathfrak{z}$ j; glycerine, f. $\mathfrak{z}$ j. M. Shake well before using. Apply by rubbing on the parts with a piece of lint. It is severe, but the pain is transient, and you will not blister the parts.

The following will replace, with interest, the old-fashioned laudanum and sweet oil in earache: $\mathcal{R}$. Morphine, gr. ss; atropine, gr. ss; water, f. $\mathfrak{z}$ ss; glycerine, f. $\mathfrak{z}$ ss. M. Warm it, and drop a few drops into the suffering ear.

Why not dissolve morphine in camphor-water when you wish to prescribe it in fevers, or in after pains of the parturient?

The following was the late Prof. R. O. Cowling's favorite cough remedy: $\mathcal{R}$. Bromide potassium, $\mathfrak{z}$ iv; cyanide potassium, gr. i; syrup wild cherry, f. $\mathfrak{z}$ i v. M. Give a teaspoonful at a dose.

This is a specific for urticaria: $\mathcal{R}$. Magnesium sulphate, $\mathfrak{z}$ j; iron sulphate, $\mathfrak{z}$ j; acid sulphuric, dil., f. $\mathfrak{z}$ ij; tr. gentian, f. $\mathfrak{z}$ j; water, f. $\mathfrak{z}$ viiij. M. Give a tablespoonful in water every four or five hours.

When you practice massage, the following: $\mathcal{R}$. Acetate zinc, gr. viij; vinegar, Oj. M. Will not only add greatly to the efficacy of the massage, but also will impress the patient with the idea that something else is being done besides rubbing.

For the erythema and itching between the thighs and on the buttocks of fat people, either calomel or bismuth subnitrate rubbed on dry will make you proud of yourself.

The following: $\mathcal{R}$. Castor oil, f. $\mathfrak{z}$ j; glycerine, f. $\mathfrak{z}$ ij; spts. lavandula comp., cinnamon water, ãã f. $\mathfrak{z}$ ss. M. is the best laxative and most palatable for the parturient woman that I have yet tried. Dose, the same as castor-oil.

There is nothing like the compound tincture of benzoin for frost bites.

As a child's tonic try: $\mathcal{R}$. Quinine sulph., gr. xj; acid tannic, gr. xx; paregoric, f. $\mathfrak{z}$ ss; tr. cinchona, f. $\mathfrak{z}$ ss; spts lavandula comp., f. $\mathfrak{z}$ ijj; simple syrup, f. $\mathfrak{z}$ iv. M. Dose, a teaspoonful. It is hard to make. Get some good druggist to make it for you.

Nothing like this for head lice: $\mathcal{R}$. Corrosive sublimate, gr. ij; acetic acid, dil., f. $\mathfrak{z}$ j. M.

And this for toothache : $\mathcal{R}$. Acetate lead, gr. x ; distilled water f. $\mathfrak{z}$ ss ; tr. opium, f. $\mathfrak{z}$ j. M. Apply to the hollow tooth with absorbent cotton.

And this for dysuria in infants : $\mathcal{R}$. Muriate ammonia, $\mathfrak{z}$ j ; po. ipecac., gr. iv ; po. opium, gr. ij. M. ft. pulv. 15. One twice a day.

And this instead of alcohol in fevers. $\mathcal{R}$. Glycerine, f. $\mathfrak{z}$ j ; tartaric acid, gr. xxx ; water, Oj. M. Two tablespoonfuls every hour.

A Contribution to the Pathology of Malarial Fever.

Drs. W. T. COUNCILMAN and A. C. ABBOTT, of Baltimore, report in the April number of *The American Journal of the Medical Sciences*, two cases of malarial coma, with post-mortem examination, of especial interest in connection with which was the presence of small hyaline masses in the brain and elsewhere. The authors fully consider the arguments pertaining to the supposition that these hyaline bodies are living organisms, without being able to arrive at any definite conclusion. With a view of shedding some light on the subject of lower organisms in malaria, they made a careful search for the bacilli of Klebs and Tomasi-Crudeli, and for any other lower organisms in all of the cases of malarial fever which came under their observation on the post-mortem table. In no case were any bacilli, bacteria, or micrococci found. Only in the two comatose cases, which they have fully described, were the singular hyaline bodies found. This is an argument against the probability of these hyaline bodies being micro-organisms. They cannot suppose the comatose form of malarial poisoning to be a special disease, and were a lower organism found in this, it should also be found in other cases.

The Diagnosis of Submersion During Life or After Death.

The Paris correspondent of the *London Lancet* writes that, struck with the divergence of opinion among authors as to the diagnosis of submersion having taken place during life or after death, Dr. BOUGIER made a new study of the subject. From experiments and autopsies at the Morgue, he formulates the following conclusions : 1. The exterior aspect of the body is about the same in both cases—that is, when the body has been submerged before or after death ; the appearance of moss on the body would be of some diagnostic value. 2. Water and foreign bodies penetrate into the air-passages and into the bronchial tubes of those submerged before, as well as of those immersed after death ; but in the latter the foreign bodies do not go beyond the fifth or sixth divisions of the bronchial tubes, and the liquid is arrested at the bronchi of medium size by the column of compressed air ; whereas, in the submerged during life, it penetrates down to the small bronchial tubes. 3. The epiglottis is vertical in the submerged ; it is only half open in the corpses immersed. 4. Water penetrates in a pretty large quantity to the stomach of the former, but never to that of the latter ; and in making a comparative analysis of the liquid found in the bronchial tubes, one might arrive at a certain diagnosis. 5. The same is the case with the middle ear. 6. The characteristic moss is found only in the submerged. 7. If the fluidity of the blood exists in certain cases of poisoning by opium, it is easy by the aid of the spectroscope, and by analysis, to form the diagnosis. 8. In putrefied corpses, all the signs have nearly disappeared, and the medical jurist can only draw conclusions by presumptions.

The Uses of Sulphide of Calcium.

Before the West London Medico-Chirurgical Society (*Med. Press*), Mr. R. F. BENHAM read a paper on this subject, in which he remarked that in his opinion very many of the failures in the use of this drug were due to too sparing administration. Dr. Ringer drew the attention of the profession to this drug in a paper in vol. i., *Lancet*, 1874, in which he stated that sulphide of calcium, possessed the power of arresting and preventing suppuration in such cases as boils, carbuncles, scrofulous and glandular enlargements, and in many skin diseases. After reading many cases treated by various practitioners, the author remarked on the number of unsuccessful cases, and said the quantity given had been too small. A $\frac{1}{8}$ grain dose might cure in one case, but not necessarily in another. He regarded the appropriate dose for an adult to be one grain in pill "ter die," but if after, say a week, no improvement occurred, he made an increase of one grain per diem, or every few days, until about eight grains daily were reached. The dose which had hitherto been regarded as poisonous, he found did not produce alarming toxic symptoms; secondly, only a small quantity of the drug taken is decomposed in the alimentary canal to form H_2S ; and last, but not least, from the ordinary dose he did not find anæmia produced, but on the contrary, even where six or eight grains daily were given, general improvement in health resulted, even when the drug failed in curing the symptoms for which it had been administered. The author maintained that the physiological action of the drug is not due to its conversion into H_2S in the organism; it could not be that only a small portion is absorbed and the remainder passed off unchanged

—for if so, why should a large dose effect a cure when a small one failed? The author preferred giving the drug in pill, as by this means the taste is unobserved. Mr. Benham read notes of a series of a large number of cases treated with success, and also recommended the drug in phthisis, typhoid, and small-pox.

The President, Mr. Frederick Laurance, had found the drug caused intestinal derangement; he had found it useful in gum-boil. Dr. James Thompson found one-tenth grain the safest dose to begin with. Mr. Maitland Thompson had not found it useful in strumous glandular affections.

Diphtheria.

Dr. I. J. M. Goss writing to *Eastern Med. Jour.*, concludes as follows:

The treatment must be very rapid at the outset, which is the only hope of success. In mild cases which may get well themselves, the chlorides of iron, and potash have been used with apparent success, and so of some other remedies, but to cure a case of the more grave type, the best antiseptics must be given at the start, and constantly continued to the end of the attack. Where the disease is from a systemic poison, or inoculation, yet the local manifestation must also be met by appropriate local means, as a spray of permanganate of potash, 4 to 6 grs. to the $\mathfrak{z}$, used every one or two hours; or a saturated solution applied with a pencil brush as often. And between the times of using the above, the throat may be touched with a brush or swab dipped in equal parts of alcohol and spirits of turpentine.

Internally, the patient should take 1 or 2 grs. of sulphide of calcium every two hours, and alternate that with the

tincture of baptisia tinctoria. If no improvement be manifested in twelve or twenty-four hours, then give 1 to 1 1-2 grs. of the permanganate of potash every two hours, in alternation with the sulphide of calcium, and have the tonsils and palate sprayed with a solution of the compound tincture of iodine, say 1 part to four of water, every one or two hours, and at the same time if the lymphatic glands are affected, the ointment of iodine should be applied to them three times a day. If these remedies then fail, the child's throat should be touched with the tincture of eucalyptus globulus every two hours, and 10 to 15 drops given in *sweetened water*, every two hours. Equal parts of iodide of potash, and the chloride of potash is used by some writers, and with good results, say 1 3 of each, to 6 3 of water, dose 1 3 every half hour, so that the throat will come in contact with the solution and the system become saturated with it as soon as possible.

Treatment of Diphtheria by Balsam of Peru and Oil of Turpentine.

Dr. ROBERT OFNER makes reference in the "Centralblatt fuer die gesammte Therapie," to the treatment of diphtheria with oil of turpentine. He reports sixty cases in which he used the Balsam of Peru locally. The balsam was diluted with alcohol and turpentine added. He claims that application of this mixture with a soft brush will cause the patches to clean off rapidly and reduces the inflammatory condition in three or four days. But two cases of the series died; and that it was genuine diphtheria he dealt with is proven by paralysis of deglutition, strabismus, etc. that developed as sequels. Ofner recommends in addition a gargle of chlorate of potassium, if the child is old enough to use it.—*Weekly Med. Review.*

Tincture of Iodine in Diphtheria.

Out of fifty-five cases treated with tincture of iodine (some of them very grave), Dr. EDWARD ADAMSON (*Practitioner*), says that fifty-three recovered without any troublesome sequelæ. The dose for adults is five to seven minims every hour or two, according to circumstances; and for children of six to twelve years, two to three minims every two hours in syrupus aurantii and water, or in some other neutral syrup. The syrup of quince makes a very good vehicle. Within thirty-six hours a marked improvement in every respect is noticeable, which is generally perceptible even to the patient, so that there is often an eager desire to accelerate the frequency of the doses of the iodine.

How to Make Gruel.

MISS PARLOA's directions in *Gail-lara's Med. Jour.* "To make flour gruel properly, you use one quart of milk, three tablespoonfuls of flour, and a teaspoonful of salt. Pour all the milk, except a cupful, into a double boiler. Mix the flour with the milk you reserved, and stir it into the boiling milk and let it cook thirty minutes, putting in the salt ten minutes before it is done. The longer milk cooks the more laxative it is. If you wish to make the gruel especially nutritious, cook a half-cupful of raisins cut in two in the milk during the entire time. This drink is very stimulating, and is often given in place of wine to patients. In Indian-meal gruel the meal must always be well cooked, an hour or two being usually required. But it is better to use the very fine meal now in use rather than that milled by the old process, and always, when needed quickly, put it into boiling water at once. To make this gruel, take one quart of boiling water, two tablespoonfuls of medium

meal, one tablespoonful of flour, one teaspoonful of salt ; mix the meal, etc., with a half cup of cold water, and pour into boiler. Stir while it is cooking and cook not less than thirty minutes. Always keep the saucepan covered."

Compound Tincture of Benzoin.

Under the heading of "Friar's Balsam," DR. TITUS DEVILLE, gives a very interesting account of this drug and its usefulness in medicine.

The doctor considers its antiseptic virtues ; its astringent and stimulating properties ; and its therapeutical value externally when applied to wounds or diseases of the skin, abrasions, etc. ; internally in various fluxes and disorders of the mucous tract. As to its antiseptic virtues he summarizes as follows :

1. It coagulates albumen—(a) of the blood ; (b) synovial fluid of tendinous sheaths and articulations ; (c) albumen serum which bathes the meshes of aureolar tissue ; (d) the albuminous fluid which moistens the surface of serous membranes of splanchnic cavities.

2. When applied to the surface of wounds, it coagulates immediately the albumen, which forms a grayish-white layer. This coagulum is pure albumen.

3. It provokes no inflammatory action or irritation.

4. It arrests the bleeding of small vessels.

5. It favors union by first intention, by producing an immediate coagulation at the surface of wounds and by accelerating the plastic secretion.

6. It prevents diffusive phlegmon (cellular cutaneous) by coagulating the albumen of aureolar tissue, which becomes at once dense and impermeable to any noxious liquids bathing the surface of the wounds.

7. It prevents the propagation along

tendinous sheaths of prurulent fluids by coagulating instantly the albumen of the synovia, and causes the surfaces of the sheaths in contact to become adherent, rendering them impermeable to liquids, bathing the surface of recent wounds, and favoring adhesive inflammation of the synovial sheaths in the vicinity of the wound.

8. It prevents purulent infection by coagulating the blood in the open veins at the surface of wounds, and in consequence of the instantaneous obstruction favors a prompt local adhesive phlebitis.

With regard to its stimulant and astringent qualities, in acute inflammations its exhibition internally requires caution. It is useful in many internal disorders, especially in constitutions and diseases attended with marked debility ; in all asthenic fluxes ; but is contraindicated in cases of great gastric irritation, or, having sthenic phases. Applied to recent wounds it causes pain, and is frequently an irritant to such an extent as to impair an somewhat endanger union by first intention. But when the edges of a wound have been carefully brought together and maintained by unirritating methods, then a solution composed of equal parts of Friar's balsam, collodion, and glycerine, with tannic acid, to brush over the intervening exposed parts of the wound, acts mechanically by forming a thin transparent pellicle, thus excluding the air, and keeping the parts in close apposition. In threatened bed sores, chronic inflammation of the flexures of the thighs and sides of the scrotum, vulva, etc., it quickly induces healthy action. It is a powerful stimulant when applied to foul and indolent ulcers, and is an excellent preparation to apply to a carbuncle when the slough is separating. Injected undiluted it decomposes foetid

secretions, and establishes healthy action in these troublesome affections. It is a valuable hæmostatic when applied to fresh wounds. Dr. Deville finds it very efficacious in chronic skin diseases of the scaly variety, when combined with vaseline, iodoform, zinc ointment, ungt. hydrarg. nitratis, oleum cadeni, creosote, or petroleum. He uses it mixed with equal parts of proof spirit or brandy, and injected into the uterine cavity, in severe cases of post-partum hemorrhage. Alone or combined with equal parts of tannate of glycerine, it also has a wonderful efficacy in cases of abrasions of the mucous membrane, and slight ulcerations of the os uteri, applied on cotton wool. It also proves very useful in gonorrhœa when combined with copaiba, oil of sandal wood, and other preparations after the acute stage has ceased. He uses the following in chronic bronchitis by way of inhalation, where there is a profuse secretion and troublesome cough: Creosote, tincture of conium and compound tincture of benzoin. In phthisis, inhalations of carbolic acid, eucalyptol, tincture of conium, as adjuncts to the compound tincture of benzoin, one or more, as dictated by experience, frequently gives considerable relief. In all asthenic fluxes, especially in internal hemorrhage unconnected with piles, he combines this drug with the tincture laricis and liq. opii sed.—*Jour. Amer. Med. Asso.*

Disinfectants—A Contribution to Their Study.

Dr. J. W. MILLER (*The Practitioner*) concludes an interesting paper on this subject, as follows:

1. It is very doubtful whether any efficient disinfection of a room can be practiced while it is occupied. Nevertheless, it is possible that the presence of a disinfectant, though not in sufficient

concentration to kill contagium, may, by long continuance of operation, weaken it, and if microzymes be the contagion, may so lower their vitality as to impair their power to produce their kind. It is, therefore, in the direction of good to employ some disinfectant during the progress of a case of infectious disease, and there is none equal to sulphur, either in efficiency or simplicity of application.

2. The skin of a patient should be sponged several times a day with dilute acetic acid, by preference the aromatic. This is especially applicable in scarlet fever, effectively disinfecting the desquamating skin. The strength of the solution must be regulated by what is found agreeable to the patient, a five per cent. solution of the aromatic acid is generally not too strong,

3. For the final disinfection of the sick room, nothing equals sulphur. But it must be thoroughly applied. The Dundee sanitary authority uses about three pounds of sulphur to a room about ten feet square, carefully closing all apertures by which the fumes might escape, and leaving the room shut up for about four hours.

4. For disinfection of clothing, etc., the method followed here is exposure to a temperature of 240° F. for three hours in a specially constructed chamber, the air being also charged with the fumes of about six pounds of sulphur. It is scarcely possible that any contagium can live through such an ordeal.

5. Excreta are best dealt with by Dr. Douglas' method, namely, mixture with hydrochloric acid diluted one to twenty. He has proved that this solution does not injure the metal fittings with which it comes in contact. Clothes may also be thoroughly disinfected by this agent without injury.

6. For hand disinfection carbolic acid

solution, one to twenty, acetic acid, and sulphurous acid are effective.—*Det. Lancet.*

DISEASES OF THE NERVOUS SYSTEM.

Nervous Paroxysm.

Dr. HENRY T. BYFORD, in an interesting article published in *Jour. Amer. Med. Asso.* gives the following diagnostic points between true syncope and nervous paroxysm.

TRUE SYNCOPE.

1. Often preceded by a feeling of oppression about the epigastrium, or nausea and general malaise. Patients feel the attack coming on.
2. Pallor, vacant expression of countenance, and mental calm in the beginning, with dullness of special and general sensation.
3. Muscular relaxation.
4. Dyspnœa, if any, not distressful—objective rather than subjective.
5. Unconsciousness absolute.
6. When not fatal, attack passes away rapidly, especially if patient in recumbent position.
7. Temperature normal or below (unless elevated by disease).
8. Seldom recurs if head be kept low.
9. Heart's action greatly depressed.
10. Seldom very disagreeable recollections of distress during the attack.
11. Stimulants afford relief.

NERVOUS PAROXYSM.

1. Often preceded by nervous irritation, heaviness about the stomach, and frequent desire to take a deep inspiration (gaping); sometimes by a feeling of nervous exaltation, or equanimity greater than usual. Onset is usually sudden.
2. Pallor, anxious countenance, mental distress in the beginning, with acuteness of special and general sensation.
3. Muscular rigidity or activity.
4. Dyspnœa distressful—more subjective than objective.
5. Seldom absolute unconsciousness. Mental confusion or incapacity.
6. Passes away gradually, more rapidly if head and shoulders be elevated.
7. Temperature normal or above.
8. Usually recurs, or threatens to recur shortly, even if patient lie down.
9. Heart's action irregular, spasmodic, and only moderately depressed.
10. Very disagreeable recollections of distress during the paroxysms.
11. Stimulants aggravate.

DISEASES OF THE URINARY ORGANS.

On Sugar Found in the Urine in Diabetes Mellitus After Ingestion of Carbo-hydrates.

PROF. WORM-MÜLLER has made some very exhaustive studies on the clinically important subject of ascertaining the capacity of diabetic individuals to as-

similate the various carbo-hydrates. His conclusions are especially valuable and reliable, since parallel observations were made on healthy and diabetic persons. His experiments related to the ingestion of, *a*, grape sugar; *b*, fruit and grape sugar; *c*, starch; *d*, cane sugar; *e*, lactic acid.

From the original publication, as appearing in *Pflüger's Archiv für die gesammte Physiologie*, vol. xxxvi., Nos. 3 and 4, we abstract such deductions as have a direct bearing on therapeutics:

a. In all experiments with grape sugar the secretion of sugar was found in diabetes to be essentially the same as under normal conditions.

b. Experiments with grape sugar in light forms of diabetes proved: 1. Ingested grape sugar appears quickly in the urine. 2. The view to be erroneous that all nutritive matter taken into the digestive tract as sugar must be transformed into glycogen before being secreted as sugar in the urine. 3. That only a small fraction of the ingested grape sugar passes into the urine. 4. That this fraction, however, *ceteris paribus*, is larger than in healthy individuals.

c. Observations with starch showed: 1. That the grape sugar formed from the starch appears rapidly in the urine and disappears as rapidly from it. 2. That not even under these conditions does the grape sugar in the urine depend upon the glycogen of the liver. 3. That diabetic persons cannot on an empty stomach take a certain quantity of starch without having grape sugar appearing in the urine, and that this difference between healthy and diabetic persons is a constant appearance. 4. That diabetic individuals retain but imperfectly the grape sugar formed from starch.

d. With cane sugar the following con-

clusions were obtained : 1. The grape sugar formed from cane sugar appears partially in the urine and is rapidly eliminated. 2. The grape sugar in the urine does not, even under these conditions, come from the glycogen of the liver. 8. Diabetic persons differ from healthy ones by eliminating cane sugar (taken on an empty stomach), not as cane sugar, but as grape sugar. 4. The grape sugar formed from cane sugar is but imperfectly retained by diabetic persons.

c. Experiments with milk sugar led to the following results : 1. The grape sugar formed from the milk sugar appears partially in the urine and is rapidly eliminated. 2. The glycogen again does not produce the grape sugar. 3. Transitory alimentary lactosuria after milk sugar (lactose) does not appear in diabetic persons, but must be regarded as a normal appearance, while transitory alimentary glycosuria after milk sugar is to be regarded as an abnormal condition, and characteristic only of diabetes. 4. The capacity of diabetic patients to retain the grape sugar formed from the milk sugar is deficient.—*Ther. Gazette.*

DISEASES OF RESPIRATORY ORGANS.

Pneumonia Treated by Intra-Parenchymatous Injections.

Boldness may certainly be necessary for success even in the treatment of disease. But what shall we say of LÉPINE's argument in favor of the local treatment of fibrinous pneumonia by intraparenchymatous injections? (*L'Union Médicale.*) If, says Lépine, an injection of a few cubic centimetres of a very weak aqueous solution of corrosive sublimate be made into the hepatized lung on the third or fourth day of the disease, in three or four places equidistant a few centimetres from one another, and

preferably at the periphery of the lesion, with a view of preventing the extension of the disease, the following phenomena are observed : (1) At the seat of infection an immediate diminution of the crepitant râles and tubular breath-sounds, which are in part replaced by respiratory silence and some larger râles ; (2) sometimes later, a transient exacerbation of the temperature of body ; (3) the next day a great improvement in the general condition, and notably a precocious defervescence ; and (4) a resolution which, to judge by the persistence of the "souffle," especially in the hepatized parts that have not been treated, takes place very much earlier than would have been the case under ordinary circumstances. As to the relative innocuousness of the intra-pulmonary injections in the doses employed (20 to 25 cubic centimeters of 1 in 40,000 solution of bichloride of mercury), when care is taken to keep away from the large vessels at the hilus of the lung, and not to penetrate the lung more than three or four centimetres. M. Lépine urges that he has not lost a single patient and has not had one accident. The only inconvenience is the pain, but this is not great, and may be still further relieved by adding morphine to the solution. After the introduction of the sharp needle, and before the syringe is fitted on, a few drops of blood are allowed to escape ; the injection must not be delayed or the needle will become plugged. When the needle is inserted into healthy lung or into tuberculous lung it does not as a rule yield blood. In the healthy lung such injections produce sufficiently defined lesions. Experiments on the lungs of healthy hogs showed that at the site of injection of a rather stronger solution than that mentioned above there was a circumscribed and indurated area,

which was made up of blood and congestive œdema. The lesions were less marked with the 40,000 solution.—*Lancet*.—*Med. Age*.

A Remedy for Hay Fever.

R. Acidi boracici pulv., 3 ss.; sodii salicylatis, ℥ij.; cocaini hydrochlor, gr. ij. M. S.—A small quantity puffed into the nostrils by means of an insufflator.

This remedy, Dr. JOHN PHILPOTS says, in the *Brit. Med. Jour.*, is also quite capable of preventing coryza if used at the onset of the attack, *i. e.*, the sneezing stage.—*Med. and Surg. Reporter*.

DIGESTIVE TRACT.

The Treatment of Tænia by Chloroform.

Dr. W. H. BENNETT, of Brooklyn, N. Y., writes as follows to the *Medical Record*:

As there has been some considerable discussion during the past year regarding the efficacy of chloroform in either killing or completely anæsthetizing tapeworm, so that its expulsion is rendered an easy matter by the simultaneous or after-administration of a brisk purgative, I beg to call attention to three cases where the drug mentioned was primarily successful in bringing about this result.

The first case was that of a girl, aged 15, whom I had previously dosed with most every known tænicide, with the result each time of bringing away a portion of the worm, but always minus the head. On July 10, 1884, I administered half a drachm of chloroform in 2 ounces of mucilage, and in half an hour afterward 1 ounce of castor oil. At about noon the bowels moved freely, and the parasite was expelled entire.

Case No. 2 was an adult, aged 52.

He had also been subjected to treatment by male fern and other drugs, but unsuccessfully. On January 25, 1885, I ordered him half a drachm of chloroform, as above mentioned, followed by an ounce of castor oil, and within four hours the whole worm was passed.

Case No. 3 had suffered from the presence of a tænia for a year and a half. Had tried many remedies without avail. I gave him the same quantity of chloroform, but combined the castor oil with it. The result was entirely satisfactory.

All three patients have remained well since. In each case the patient was allowed to eat a light supper, and the medicine was given before the breakfast hour in the morning, no food being allowed till the bowels moved. The only disagreeable symptoms caused by the chloroform were in one case slight nausea, and in all a trifling sense of intoxication, with slight headache and somnolence, which passed off in a couple of hours after the oil operated. No further discomfort was complained of.

It will be noticed that half a drachm was the largest quantity of chloroform used. In case this should not prove sufficient, I would prefer, in subjecting the patient to treatment at a subsequent time, to administer a second half drachm some twenty minutes or half an hour after the first dose of a like amount of chloroform, or even several subsequent doses of a few drops each, at intervals of some minutes, than to give more than the maximum quantity here mentioned. By this latter method the effect on the worm might be equally as great, while the action of the drug on the heart would not be as likely to produce the alarming symptoms which have been reported where doses of one drachm or more have been given.

Deep Massage of the Abdomen in Intestinal Obstruction.

Dr. KRIVIAKIN (*London Medical Record*) warmly recommends deep massage of the belly as a powerful curative in cases of intestinal obstruction. The procedure, as practised by him, "requires only one assistant, the name of which is Patience," and consists in the following: The operator anoints his hands with oil, separates the thumbs as much as possible from the first fingers, puts the thumbs in juxtaposition, places the hands at the lower part of the belly (the patient lying on his back), and, while producing steady and strong pressure, passes his hand first from downward upward, then *vice versa*, then from the right to the left, and so on, repeating the manipulation for twenty minutes, by the end of which time "a regular peristaltic storm is set up within the abdomen." Then the patient (who at the beginning of a sitting feels rather uncomfortable, but in about ten minutes commences to experience distinct relief) is left alone for the next hour and a half, when another sitting of deep massage for about fifteen minutes may be tried. As a rule, however, one sitting is sufficient for producing stools. It happens very often that in the course of the manipulations a distinct, usually elongated, sausage-like tumor may be felt in the belly. If this be the case, fairly strong tapping at the spot of the tumor should be added to the shampooing, each stroke being finished by a strong localized pressure. According to the author, deep massage is indicated in intestinal obstruction of every kind and description. He adduces the details of four cases of the affection met by him lately among Dagestanese, and treated after this energetic plan (very energetic, indeed, especially in comparison with foul eggs or a

cock's excrements, with which obstructed patients are usually treated by numberless native medical men, so-called *khakins*).

One of the cases was that of a strongly built man, aged twenty-four, with constipation of ten days' duration, agonizing paroxysmal abdominal pain, fetid vomiting, obstinate hiccough, offensive eructation, and moderate distention of the belly. A volvulus (caused by severe physical exertions soon after a liberal meal) was diagnosed, and deep massage was resorted to after a large enema made of a weak infusion of tobacco leaves. In about ten minutes, after a sitting of twenty minutes' duration, very profuse and extremely offensive defecation followed; later on, the patient's bowels were moved five times more.

In another case, where constipation of eight days' duration and fecal vomiting were present, deep massage was performed twice, with an interval of one hour, defecation ensuing during the second sitting. In the third case, with eight days' obstruction and obstinate hiccough, recovery followed after the simultaneous use of deep massage, large enemata, and cold compresses. Less fortunate was the issue in a fourth case, that of a weak, decrepit man, aged fifty-five, with constipation of twelve days' standing, filiform pulse, fetid vomiting and eructations, cold viscid perspiration, and a semi-comatose state. Though regarding the case as a hopeless one, the author still decided to try massage, after the previous administration of two grains of camphor and a high effervescent enema. In about half an hour after the manipulations, a free discharge of hard fecal lumps, suspended in fluid, ensued. But collapse became worse, and five hours later the old man died. No necropsy was allowed.

THE AMERICAN MEDICAL DIGEST.

PART II.

SURGERY.



SURGERY.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Case of Over-extension for Fracture of the Femur.

Dr. G. MERRITT reports a case (*Med. Annals*) of fracture of the femur, where he was called in eight weeks after the accident. The patient was a young man of good constitution, and the fracture had been put up in the ordinary way with one of Day's patent extension splints. Before this was removed I measured the fractured limb, and found it an inch and a half longer than the sound one, enveloped in a starch bandage very properly applied. The bandage was then split open from top to bottom, and the extension splint removed. I found the leg from the knee to the hip was about half the size of the sound limb. From the knee to the ankle venous congestion had taken place and was of long standing. There was complete ankylosis of the knee-joint. The patient had become anxious about the probabilities of saving his leg, as amputation had been talked of.

The idea suggested itself to my mind that the first step in order would be to allow the limb sufficient time to contract to its natural length. To accomplish this result the limb was left enveloped in the same bandage, tied together with tapes at three points, until the next day, when I again visited the case with other physicians. We found, on measurement, that it had not con-

tracted to its proper length, and it was left in the same situation as the day before. On visiting the case the next day we found the leg about half an inch shorter than the sound limb. At this time I made a careful examination of the fractured ends of bone and found an oblique fracture. The exact situation was easy to get at, as the thumb and finger could be easily passed between the ununited ends of bone, on account of the extreme emaciation of the muscles; the limb could be easily placed in any position by taking hold of the foot and swinging it like a gate on its hinges, without causing much pain. I concluded to treat the case without making use of extension. It was then dressed with two short splints, one on each side of the fracture, inside the starch bandage, and the limb placed perfectly straight. In this position it was left for five weeks, with an occasional measurement, at the end of which time it was found perfectly united. In the course of another week the patient was placed in an upright position and directed to bear some weight on the fractured leg; this was repeated every day until the end of the eighth week.

As before stated, a complete ankylosis of the knee-joint had taken place. On the first day of the ninth week, after a proper adjustment of the fracture, the patient was able to visit my office, and with assistance we broke up the adhesions. The operation was so thoroughly and completely performed that it was not necessary to repeat it. The

young man has now as good and useful a leg as its fellow, except the shortening, which is about half an inch. This case simply shows that too much extension can be made use of.

Union of Wounds and Fractures in Old Persons.

It is so unusual for fractures to unite in aged persons, that all such cases are worthy of record. Dr. EDGAR SCHMIDT reports a case in the *British Medical Journal*.

The patient, a healthy German lady, aged 78 or 80 years, was in the act of plucking a bunch of grapes, when her foot slipped, and she fell from the first round of a ladder on which she was standing. The fall resulted in fracture of the neck of the left femur. Her limb was encased in a long splint with weights, and, notwithstanding her restlessness and obstinate spirit, she was able to walk with canes in six or seven weeks. No unfavorable symptom arose with the exception of two bed-sores, which, however, yielded kindly to the application of balsam of Peru.

The lady enjoyed moderate good health, until one year after her fracture, when she died as a result of gangrene of her right foot.

A Case of Impacted Extra-Capsular Fracture of the Neck of the Thigh Bone.

The following is a short abstract from a very interesting article by Dr. J. C. HUTCHINSON, published in *New York Medical Journal*:

It will be observed in the history of this case that two of the most important signs of fracture of the neck of the femur, whether impacted or not, were absent—viz., pain on pressure over the trochanter, and eversion of the limb. Pressure against the trochanter major,

instead of aggravating the pain, gave great relief, and, on that account, was constantly kept up; first, by lying upon the trochanter, and, after the apparatus was applied, by means of a large sand-bag. There was absolutely no eversion, the position of the foot was normal, and the right foot can now be inverted and everted as far as the left.

Outward rotation of the limb, in impacted as well as other fractures of the cervix femoris, is the rule; but exceptional cases are recorded where the limb was inverted or the position of the foot was normal, turned neither in nor out. The position depends upon the direction of the fracturing force.

This fracture is produced, in a great majority of cases, by falling forward and on the side, striking the front and lateral aspects of the trochanter. The force applied in this direction would inevitably produce posterior impaction, and eversion as a consequence. But, if the force is received upon the outer and posterior aspect of the trochanter, the anterior wall will be impacted, and we shall have inversions of the limb. And when the fracturing force is applied directly upon the outer surface of the trochanter, in the direction of the axis of the neck, as in the case here reported, the whole base of the cervix is implanted into the trochanteric portion of the femur, and the limb will retain its natural position.

When we remember that inequality in the length of the lower extremities is often a normal condition (which may have existed in this case), that there was no pain on pressure over the trochanter, that the foot rested directly upon the heel, and that the recovery was so rapid and complete, the question may naturally arise, was this a case of fracture, or was it an injury which did not involve the integrity of the bone?

Every experienced surgeon is aware of the difficulties sometimes attending the diagnosis of fracture of the neck of the femur, especially when the upper fragment is firmly implanted into the cancellated tissue of the lower. A majority of the symptoms of fracture may be present in cases in which the neck of the femur is uninjured; and, on the other hand, fracture may be unaccompanied at first by the more important of the usual diagnostic signs. In cases of violent contusion of the periarticular muscles of the hip, all the component parts of the joint having received a severe shock—the result of a fall upon the trochanter—the symptoms are at first almost identical with fracture. In either case there may be eversion of the foot, shortening of the limb, which existed prior to the injury, an absence of crepitus, and an inability to raise the extended limb from the bed by a voluntary effort. In such a case, how are we enabled to ascertain the real nature of the injury?

This can generally be done by observing the relation which the trochanter major bears to the anterior-superior iliac spine. When the relative position is the same on each side, it usually indicates that there has been no other injury than contusion; but when it is altered, in a joint previously healthy, it denotes the presence of fracture.

A change in the normal relation of the two processes does not, however, always indicate the existence of fracture. A change in the position of the trochanter major, with reference to the iliac spine, may have been produced by chronic rheumatism of the hip-joint. In such a case the bearings of the trochanter, with respect to the iliac spine, will not serve as a diagnostic mark between a contusion of the hip and an impacted fracture of the neck of the

femur. The previous history of the case will, however, assist in determining the nature of the lesion.

In investigating these injuries we should not form our opinions from any particular symptom, but all the symptoms which the case presents should be considered in order to arrive at a correct diagnosis.

In the case under consideration, the pathognomonic symptoms of fracture were:

1. Depression of the trochanter major on the injured side. This process was, according to the measurement of Dr. Halsted on the fifth day after the injury, three quarters of an inch nearer the iliac spine on the right than on the left side.

2. The spasms or twitchings in the muscles surrounding the joints during sleep, and continuing for five days.

3. The deposit of callus, toward the end of the third week, in the groin, on the outer side of the femoral vessels, and just below Poupart's ligament.

An interesting incident in the case was the variation in measurements by the three surgeons who first saw the patient—all men of large experience in the treatment of fractures. This is, I believe, not an uncommon experience. We can not always be sure that we have measured from exactly corresponding points on the anterior-superior spinous processes of the ilia.

On June 14th the patient was measured by Professor Frank Hamilton, who found only one-sixth of an inch shortening. He remarked that he had never before seen so good a result after such an injury.

The small amount of shortening indicated that the impaction was not deep, and yet it was enough, with intelligent care on the part of the patient, to prevent separation of the ends of the frag-

ments. The diagnosis of fracture was sufficiently clear in this case without manipulation, but, had there been a reasonable doubt of the nature of the injury, violent manipulations would have been manifestly improper. The utmost caution was observed in examining the limb.

In any case of suspected impacted fracture of the cervix femoris the discreet surgeon will prefer to treat the case as one of fracture rather than incur the risk of damaging his patient by instituting such an examination as is necessary to produce crepitus. This rule should be observed even when the bone is not impacted in the best position. It is better that malposition of the limb should not be corrected than that impaction should be broken up by unwarrantable manipulation, and the union of the fragments thereby endangered. The most important feature in the treatment of such cases is, therefore, to maintain the impaction. This can be best accomplished by keeping the patient at rest, by avoiding undue manipulations, by moderate extension in the straight position to steady the limb, and by lateral pressure over the trochanter by means of a sand-bag, or a long external splint.

Violent extension would disengage and displace the impacted fragments, and make non-union almost inevitable. If, for any reason, it is necessary or desirable for the patient to get out before firm union of the fracture has taken place, this may be done with safety, at the end of the fifth week, by applying one of Johnson's felt splits, or some similar appliance, enveloping the body to midway between the hips and axilla, and the thigh and leg to midway between the knee and ankle. The felt is made pliable by holding it before a fire or immersing it in hot water, or,

still better, by covering it with a wet cloth and softening it by a hot smoothing iron. It is then applied over a tight-fitting pair of drawers and rapidly covered with a bandage. The splint adapts itself to all the inequalities of the surface, and, if well applied, does not make undue pressure at any point.

Pin-Swallowing.

This feat is not uncommon among children, and it gives rise to great terror on the part of the parents. A correspondent of the *Lancet* tells us that a boy was recently brought to him who had swallowed a pin. He ordered plenty of bulky food, such as would tend to keep the bowels somewhat inactive, and carefully avoided any aperients. Three days later, the pin was passed in a mass of fæces.

Dislocation of the Ankle Outwards.

FISCHER, of Hanover, reports two cases in which there was outward dislocation of the ankle-joint.

The first case was that of a man, twenty-three years of age, who slipped on a small piece of wood, and fell in a manner that his left leg was caught under his body. On examination it was found that there was considerable deformity of the ankle-joint; there was plantar flexion, and the tip of the foot was sunk, so that the long axis of the foot made an angle of 130° with that of the leg. The foot could not be rotated around the sagittal axis. The heel was twisted toward the median line, and the tendo Achillis was slightly stretched. The internal malleolus was sprung forcibly against the skin. On the external surface also there was a bony projection, which was not the external malleolus, however, but the fibular articulating surface of the tibia. By pushing the finger

behind this the external malleolus could be felt. The fibula was fractured in the usual place.

Reduction of the dislocation was easily performed, and the functions of the joint were completely restored. Fischer believes that the fibula was broken by the twisting of the foot on the piece of wood, and that the joint was dislocated by the fall of the body upon the foot.

The second case was one of rupture of the ankle-joint, with fracture of both malleoli, and outward dislocation of the joint.--*Centralbl. für Chir.*

Reduction of Dislocation of Humerus.

The Southern *Clinic* thus gives Dr. GISSLER's method of reduction:

"In my cases, the patients do not even have to sit down, and I operate thus:

1. The elbow is pressed against the abdomen and then gently drawn outward until resistance is met with.

2. The forearm is then raised as high as possible toward the opposite shoulder.

3. Then the whole arm is drawn outward and the operation is finished."

This is a valuable addition to our knowledge of the operations which are daily needed. It is simple, accurate and may be of use.

A New Powder-Applicator.

MAGNUS, of Breslau, describes a new instrument, invented by Kabierske, for the application of medicinal powders to diseased surfaces. It consists of a rubber balloon connected at a right angle with a glass flask which holds the powder. Air is driven into the flask on compressing the balloon, which drives the powder out of another opening into the exit-tube. Magnus has used this

with great satisfaction in his clinic.—*Klinische Monatsblätter.*

The Neoplastic Diathesis.

M. VERNEUIL, in an address delivered before the International Medical Congress, said that he desired to prove : (1) that all true neoplasms, by the identity of their constitutional origin and their primary causes, make up a natural pathological group ; (2) that they grow by virtue of a special disposition of a particular morbid disposition:—in a word, of a diathesis which he calls neoplastic ; (3) that this diathesis is neither original nor independent, but derived from a much more general constitutional derangement,—arthritis. This led him to say that the true neoplasm is an anthritic manifestation of the same type with biliary gravel, eczema, rheumatism, gout, etc. He explained at length these three propositions, commencing by a general review of neoplasia and its varieties, as well as of the different neoplasms. Among these last he retained only those which he called idiopathic or true, and after setting forth their anatomical, physiological, clinical, and etiological characters, he arrived, by summarizing these characters, at the following definition. A true neoplasm is an accidental organ, definite, superfluous, and harmful, formed by the hyperplasia of anatomical elements and tissues morphologically and chemically altered,—an organ which is the seat of a perverted and disordered nutrition and a local manifestation of a particular diathesis, having its root in the arthritic dyscrasia. This definition has as its object the definite constitution of the group of neoplasms, too often confused with that of tumors. In the second part of his address, M. Verneuil drew attention to the fact that the etiology of

neoplasms was imperfectly known and not sufficiently studied. He criticised the etiology at present accepted, and, in particular, the abuse which has been made of the word diathesis. He admitted but one diathesis for all neoplasms, at all ages, and in all conditions. This diathesis he believed to be hereditary. When it existed in a family, it could transmit itself to the descendants under a like or a different form. The oneness of the diathesis was proved, further, by the multiplicity and the diversity of the neoplasms in the same subject at one and the same time, or at different periods of life, by the multiplicity of pathological tissues in one and the same tumor, by the substitution of one form of neoplasm by another at the same spot. He examined, with the view of refuting them, the objections to the oneness of the diathesis, based on the differences of structure, of the course, and the gravity of the different neoplasms. He further laid it down that, if the ordinary causes cannot give rise to a neoplasm without the neoplastic diathesis, this in turn is powerless to produce anything of itself, and without the aid of the requisite causes. In the third part of his address, M. Verneuil, recognizing that the admission of a diathesis does not determine the question of etiology, set himself to prove that the neoplastic diathesis springs directly from arthritism, an idea already introduced to science by Bazin, but so far imperfectly demonstrated. He brought in as arguments supporting it the association, or the almost constant association, of neoplasms and arthritic manifestations, and, at the same time, the extreme rarity and almost incompatibility of these same neoplasms with scrofula, itself far removed from arthritism. Professor Verneuil, in concluding, said he did not conceal from himself the fact that his

ideas presented a broad side to criticism, and that he must, to have them accepted, keep up facts and proofs. He had not, however, hesitated in laying them before the Congress, in the hope that they would give rise to both discussion and observation, and would contribute, by the study of etiology, to raise practice out of the pure surgical path, in which at present it was exclusively occupied.—*Brit. Med. Jour.*

Professional Lipoma of Prostitutes.

The following remarkable report is found in the *London Med. Record*, taken from the *Russkaia Meditzina*, No. 13, 1884. Dr. PREIS, of the Charkov Hospital for Venereal Women describes what he calls "lipoma diffuso-circumscriptum professionale," to the existence of which in prostitutes his attention was first called by Dr. Porai-Koshitz, of Charkov. The tumor was present in 145 out of 217 prostitutes living in Charkov brothels, and is invariably situated in the region of the sixth and seventh cervical vertebra, its growth always starting from the spot exactly over the spinous process of the vertebra prominens. Its size varies from that of a nut to that of a large apple, the diameter of its base varying between two to twelve centimetres. Its shape is hemispherical or semi-oval, with a flattening in the middle. The surface is smooth, the skin tense and adherent, sometimes pigmented but otherwise normal. On palpation the tumor is somewhat firm, elastic, movable, painless. Its development begins soon after the woman has entered the profession of a prostitute, and proceeds pretty rapidly. Dr. Preis thinks that this tumor is a lipoma resulting from hypertrophy of the fatty tissue normally present in the situation mentioned above, and that its develop-

ment is caused by local mechanical irritation. The latter is given in the form of pressure to which the spinous process of the seventh cervical vertebra is especially subjected during coition, when the woman lies on her back with her head flexed, so that, the upper part of the back and lower posterior part of the neck form an angle, the apex of which is the seventh cervical spinous process. In all movements of the pelvis and limbs during the sexual act, the body's weight rests upon this region. Hence tall and well-nourished prostitutes are more liable to the development of professional lipoma than short and meagre women. The author and Drs. Porai-Koshitz and Bellin were unable to detect this tumor in non-prostitutes. Syphilis seems to have had no connection with the development of the tumor, since of 145 prostitutes possessing the lipoma 75 never had any venereal disease.—*Weekly Med. Review*.

Surgical Treatment of Acute, Circumscribed, Pulmonary Gangrene.

Dr. C. FENGER thus concludes an article with reference to the *technique* of the operation, and recommends :

1. The incision ought to be made parallel to the ribs.
2. The ribs must be excised to a degree sufficient to secure access to the part.
3. In conformity with the suggestion of Albert and Mosler, the needle of a hypodermic syringe should be used as a guide into the cavity, or diseased lung tissue, and the small platinum pole of Paquelin's thermo-cautery should be employed to effect the opening.
4. The cavity must be washed out if practicable. Due care must be exercised to prevent drowning, if the cavity connects with a bronchus. Irrigation

of the cavity was productive of no untoward effect in Buhl's case, but was the cause of troublesome cough in Fenger's patient, and Mosler ascribes one death to poisoning from thymol irrigation.

Dr. Fenger is of the opinion that there is no immediate danger of death from the operation, and that it is indicated in cases of acute, circumscribed, pulmonary gangrene.—*Chic. Med. Jour. and Examiner*.

Treatment of Slight Burns.

Dr. CRAMER treats slight degrees of burns by means of compression. He applies a layer of wadding and over this an elastic bandage, so as to make firm and even pressure over the whole of the injured surface. By this means the subcutaneous capillaries are emptied in a measure of their blood, and inflammation and exudation of serum are prevented. The compression is to be maintained from three to fifteen hours, according to the intensity of the burn, and then a less degree of pressure kept up until new epidermis has formed.—*Memorabilien*.—*Med. Record*.

Strangulated Inguinal Hernia.

Dr. HENRY B. SANDS (*N. Y. Med. Journal*): GENTLEMEN: An interesting case of strangulated hernia was admitted into the hospital last Friday afternoon. The patient was a driver of a beer wagon, who had had a hernia for several years. He had worn a truss which, he said, broke on the morning of the day of his admission; and while he was engaged in doing some heavy work the hernia came down and could not be replaced. When he was brought here in the evening we found upon the right side an oblique inguinal hernia, tense and painful, and reaching down to the scrotum. The usual symptoms of strangulation

were present, vomiting being persistent. Ether was administered at nine o'clock in the evening, and taxis, which had already been tried before admission, was repeated without success. Percussion over the tumor gave very little resonance, yet the symptoms were so acute that I thought there must be intestine in the hernial sac. I made an incision over the latter in the usual way, and on reaching the deeper structures found that no operation short of opening the sac would avail. The interest of the case turns upon a false inference which I made concerning the nature of the contents of the sac, which, as you are aware, usually contains more or less bloody serum in case the hernia is strangulated. This, in the present instance, seemed to be absent, as no fluctuation could be detected when the sac was exposed. Moreover the sac was slightly resonant on percussion, indicating the proximity of intestine, while its tension was so great that I was unable to pinch it between my thumb and finger and separate it from its contents. Lest I might wound a possibly adherent coil of intestine, I determined to use a hypodermic syringe and ascertain whether there was fluid in the sac. The result of the procedure was what deceived me. I passed the needle to a depth of half an inch, and on drawing back the piston the syringe filled with a fluid which proved to be almost pure blood, having no fæcal odor. Now we frequently notice in cases of strangulated hernia, that after the taxis has been employed the hernial sac contains blood and, inferring that such was the case here, and that the blood withdrawn by the syringe came from the hernial sac, I failed to observe due caution in performing the next step of the operation—namely, that of opening the sac—and accidentally wounded a piece of the small intestine which lay

in contact with it. Fortunately, the incision was not extensive; it simply involved the peritonæum, and did not exceed a third of an inch in length. When the sac was laid open it was found to contain no fluid, being completely filled by a loop of small intestine, which was intensely congested, and in some places ecchymotic. There can be no doubt that the bloody fluid which was withdrawn by the hypodermic syringe came from the interior of the intestine, into which it had been effused in consequence of the strangulation and of the force which had been used in endeavoring to effect reduction. As I have remarked, the wound of the intestine made by the knife was very slight and superficial; but it might well have been serious; and we may learn from the occurrence how careful we always ought to be in opening a hernial sac. The operation presented no other feature of special interest. After the stricture, which was situated in the neck of the sac, had been divided by a hernia-knife, the protruded intestine became less livid, and a few minutes later the oozing from the injured part, which had been quite free, ceased spontaneously. Reduction was then effected, and the external wound closed with a continuous suture of catgut. The operation was followed by immediate relief, no unpleasant symptoms occurred, the wound healed by the first intention, and the patient is already convalescent.

VENEREAL DISEASES.

A Case of Chancre of the Eyelid Produced by Inoculation through a Contused Wound.

Dr. ARTHUR VAN HARLINGEN (*Polyclinic*): William G., twenty-six years of age, consulted me, July 9th, 1883, for

a lesion of the left lower eyelid, of which he gave the following account :

On May 15th, seven weeks previously, he had engaged in a drunken altercation with a friend, resulting in a blow from the fist, which caused a contused wound just at the lower edge of the left orbit.

The tissues about the eye became at once considerably swollen, and to ease the tension, the point of a sharp pen-knife was thrust in, and a small puncture made. Upon this the patient's maudlin antagonist insisted upon sucking the wound, to relieve any possible inflammation. The wound healed rapidly and within a week was quite well.

Two weeks later, however, about June 7th, the patient noticed a small, elongated crust upon the eyelid, which began to puff up, and thickened, "as if a lump had formed in the lid," the patient said; while gradually an open sore appeared at the point of the puncture. Shortly after, he noticed a swelling in front of the left ear.

From the first the patient's health had failed; he had lost his appetite and become considerably emaciated. At the time of examination he complained of dull abdominal pains, with rheumatic pains in the shoulder and thighs. He had had no headache, but had suffered from dizziness and pain in the head on rising suddenly. Three days previously the left testicle had begun to swell, and without being actually painful was rather heavy, and gave rise to a dragging sensation.

On examination, the initial lesion of syphilis was found occupying the centre of the lower eyelid. (See illustration.) It appeared in the form of a typical erosion, of an oblong squarish shape, of about one-half by one-third of an inch in size, the surface slightly mammillated, red, moist, and covered with a scanty serous discharge. This was situated on

a large, flat base of induration, the size of a quarter dollar or larger, rising about one-fourth of an inch above the surrounding skin with an abrupt high border under the ciliary edge of the eyelid, but shading gradually off into the surrounding skin below. The lesion was quite painless and gave very little annoyance to the patient, in spite of the considerable infiltration of the tissues. The lower eyelid was not at all everted. The pre-auricular and anterior cervical lymphatic glands were found enlarged to the size of a small olive in each case. The inguinal glands were slightly enlarged, but the other lymphatic glands ordinarily involved were at this time apparently unchanged.

The lesion of the genitals turned out



to be a left epididymitis. There was a slight discharge from the urethra, but the patient denied having had the clap for seven years previously. There were no other symptoms of general syphilis, either on the skin, in the mouth, or elsewhere.

As it was of great interest and importance to confront the patient with the person supposed to be the source of the disease, I took pains at once to procure the address of the latter, and looked him up. I found him a young man in fair general health, but suffering from syphilis in its most marked and contagious stage. He told me he had contracted a chancre on the genitalia about

six months previously, which had been followed by a generalized eruption and recently by "sore mouth." On examination, the man's body and limbs were found covered with a papulo-squamous syphiloderm, fading in some places and evidently relapsing in others, while the buccal mucous membrane and one side of the tongue were almost covered with mucous patches. He had been under medical treatment.

Under the use of proper medication my patient rapidly improved as to his general condition, and the initial lesion, with the concomitant swelled glands, were greatly lessened in size when I last saw him. I was not able to follow the case more than a few weeks, and so could not observe the advent of the general eruption. Prof. Ashhurst, of the University of Pennsylvania, under whose care the patient chanced to come a few weeks later for some surgical affection, has recently informed me that the man was at that time suffering from a general papular syphilitic eruption, which had evidently come out in the meantime.

I have reported this case, because of the comparative rarity of the lesion, and also because of the marked form in which all the symptoms presented themselves, and the unusual circumstance of confrontation having been possible. Cases of chancre of the eyelid are quite uncommon. The tarsal edge, the conjunctival surface, and the cul de sac are most frequently attacked. In all cases enlargement of the pre-auricular ganglion is the symptom most to be depended upon in making a diagnosis, when any doubt exists as to the nature of the sore on the eyelid.

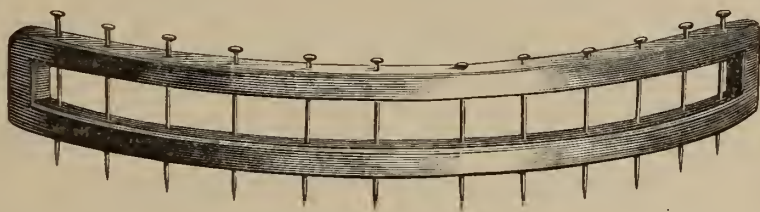
New Instrument for Operating on Varicocele.

As the operations for destroying the veins in varicocele have produced occa-

sional deaths, and in other cases ended in neuralgic scrotums, with or without atrophy of the testicle, many surgeons have followed the lead of Prof. Frank Hamilton, of New York, in preferring Sir Astley Cooper's plan of shortening the scrotum sufficiently to make it its own suspensory bag. Formerly this operation was vexatious, because the imperfect character of the old-fashioned adhesive plasters rendered it difficult to support the sutures sufficiently to secure a union by first intention. Now that we have the rubber plaster, which never lets go its grip, we can cut the scrotum very short, and still hold the wound firmly together, and secure a triumphant success.

Sundry clamps have been invented to hold the skin of the scrotum firmly while the surgeon cut it off and sewed it up. The evil of the clamp is that it compresses the arteries, so that after cutting away the pouch the surgeon is unable to find and ligate the vessels. If he sews up the wound without attending to this point, experience shows that after the clamp is removed, hemorrhage often takes place inside the scrotum, distending it with clot, and forcing open the wound, thus delaying the cure. To meet this difficulty, I have devised a kind of varicocele bow, which I here present. It consists of two curved steel parallel bars, connected at the ends and enclosing a slot three-eighths of an inch wide between them. Twelve holes are drilled through the bars of a size to admit ordinary pins. The surgeon draws the scrotum through the slot to such a distance as he deems sufficient, and secures it there by inserting, one by one, as many pins as he finds necessary to hold the pouch securely. He then cuts off the scrotum outside the convex border of the bars. As the scrotum is not pinched by the instrument, the blood spouts freely, especially from the artery

at the raphe, and the operator can carefully and deliberately secure every bleed- drawing out the pins removes the bow and applies his plasters. The neatness



ing point. This being accomplished, he sews the cut edges together, and then and dispatch of the operation are thus greatly enhanced.

Sucus Alterans.

We have had occasion frequently of late to use this preparation, so highly recommended by Dr. McDADE as an anti-syphilitic; and although we have not used it exclusively in any *single case* to test *fully* the extent of its utility, still we have found that where the drugs usually employed in this disease—potash, mercury, etc.—have been used for some time and have caused gastric disturbances, that the exhibition of this preparation has proved a great comfort to the patient, and as far as our present experience goes has fully justified the statements of its efficacy made by the doctor.

DISEASES OF THE EYE AND EAR.

Clinical Lecture on Blepharitis Marginalis —Inflammation of the Margin of the Eyelids.

The following is a short abstract by Dr. MITTENDORF, published in *Med. Times*:

In simple blepharadenitis one of the best remedies at our disposal is liquor plumbi subacetatis, which should be used in the following way: $\mathcal{R}$. Liq. plumbi subac., $\text{f } 3 \text{ j}$. Sig.—Six drops to half a tumbler of water. Use as an eye-

lotion five or six times a day for four or five minutes at a time.

If you use the lotion stronger than here indicated, it will produce a peculiar, dry sensation of the free edge of the lid, due to the powerful astringent effect of the sugar of lead. This remedy will in a short time remove the unpleasant redness of the lid entirely.

During the night, in order to prevent the gluing together of the lids, as well as to protect the inflamed parts, a very mild preparation of the red oxide of mercury is indicated. The following prescription, which is known as *Pagenstecher's ointment*, will act very nicely: $\mathcal{R}$. Hydrarg. oxid. rubri, gr. j.; vaseline, 3 j . Fiat unguent. Sig.—Apply before retiring.

In order to get the full effect of this medicine, it is necessary that the lid be thoroughly cleansed and dried before it is applied. To effect this object, the eye may be washed with: $\mathcal{R}$. Sodii bicarbon., 3 j ; aq. camphoræ, $\text{f } 3 \text{ viij}$. M. Sig.—Use at night.

Having removed all the crusts and washed the free edge of the lid with this solution, the oxide ointment may be applied. The greatest care should be exercised in preparing the oxide of mercury ointment. The druggist should triturate the red oxide with a few drops

of the oil of sweet almonds, so as to reduce it to a very fine powder, and then add the vaseline and mix well together. The difficulty of preparing this ointment properly has led us to substitute for the red oxide the yellow oxide of mercury, which is a very fine powder and can be mixed readily with simple cerate or with vaseline. The proportion may be made a little stronger when the yellow oxide is used, because it is not quite so powerful in its action. $\mathcal{R}$. Hydrarg. oxid. flavi, gr. iss; ung. simpl., $\mathfrak{z}$ j. $\mathcal{M}$. Fiat unguent. Sig.—Apply to the edge of the lid before retiring.

An inflammation of the lids of this kind will frequently extend to the conjunctiva, not only from direct extension of the inflammatory action, but also from the fact that the crusts which form on the free edge of the lid fall into the conjunctival sac and act there as foreign bodies. In this case it is necessary to use a preparation which can be applied in the conjunctival sac as well, and the following prescription has been of the greatest use to me: $\mathcal{R}$. Sodii biborat., gr. xx.; mucilag. cydon., aq. laurocerasi, $\mathfrak{aa}$ f $\mathfrak{z}$ ss.; aq. camphoræ, q. s. ad f $\mathfrak{z}$ iij. $\mathcal{M}$. Sig.—Use as an eye-lotion three times a day.

This should not only be applied to the free edge of the lid, but some of it should be allowed to enter the conjunctival sac as well.

The action of the cherry-laurel water is that of a mild anodyne, of the mucilage of quince-seeds soothing, of the camphor-water slightly stimulating, while the biborate of soda is astringent.

If the inflammatory process have extended to the integument of the lid, if we have the condition which may justly be termed eczema of the lid (in children arising from scratching the eyelids constantly), it is well to use a preparation which contains morphine or some ano-

dyne, and in this case we can use a stronger preparation of mercury: $\mathcal{R}$. Hydrarg. oxid. rubri, gr. v.; morph. sulph., gr. iss.; unguent. simpl., $\mathfrak{z}$ ss. $\mathcal{M}$. Fiat unguent. Sig.—Apply, after removing the scab and drying the parts carefully, to the excoriated parts.

In the summer, as a rule, I use simple cerate, because vaseline is too soft and will allow the red oxide to precipitate to the bottom of the jar. During the winter the vaseline may be substituted for the simple cerate, as it is softer and more easily applied, and yet not too soft.

That form of blepharadenitis which is associated with ulcerations of the free edge of the lid should be treated in the same manner, but the ulcerated parts should, in addition, be touched once a day with a solid stick of nitrate of silver. In doing this, much care must be exercised only to touch the ulcerations very gently, for, if the nitrate enters the eye, it will prove extremely painful. Applying this every day will, as a rule, lead to a perfect and rapid cure of this otherwise very tedious and troublesome disease.

There is one form of blepharadenitis which we cannot expect to cure entirely—namely, that in which the free edge of the lid is completely altered. In these cases you can only expect to relieve the troubles partially, allay active inflammation, without, of course, being able to change the cicatricial conditions, and for this purpose I use a salve which is to be applied at night: $\mathcal{R}$. Hydrarg. oxid. rubri, gr. ii.; liq. plumbi subac., gtt. x.; vaseline, $\mathfrak{z}$ ii. $\mathcal{M}$. Fiat unguent. Sig.—Apply before going to bed.

During the day such patients ought to use a solution of alum and camphorated water: $\mathcal{R}$. Alum., gr. x.; aq. laurocerasi, f $\mathfrak{z}$ ss.; aq. camphoræ, f $\mathfrak{z}$ j. $\mathcal{M}$.

Sig.—Use as an eye-lotion three times a day.

One word with regard to the hygienic management of patients suffering from blepharadenitis and eczema of the lids. Such patients should not be kept in badly-ventilated rooms. Their bedrooms especially should be light and have good ventilation. They ought to have as much out-door exercise as possible, and their general condition ought to be faithfully attended to. You will find in most of these cases that their diet has been sadly neglected by the parents. You should insist that the child have only three meals a day, nothing whatever between meals. Sweets and pastry, such as pies, etc., ought not to be allowed. The child ought not even to have bread or crackers between meals. The following mixture, which varies a little from the official, may be given with advantage: *R.* Sodii bicarb., 3 ij.; fl. ext. rhei, f 3 ij.; ess. menth. pip., ess. zingib., aa f 3 j.; aquæ ad f 3 iv. *M.* Sig.—For a child, a teaspoonful three times a day; for an adult, a tablespoonful three times a day, half an hour before meals, diluted in sufficient water to make it pleasant to take.

There is another form of blepharadenitis, accompanied by thickening of the free edge of the lid. This thickening can be best relieved by the following application: *R.* Ungt. hydrarg. nitr., 3 ss.; ungt. simpl., 3 iij. *M.* Fiat unguent. Sig.—Apply morning and evening.

I have spoken also of another—the squamous—form of blepharadenitis. Here it is absolutely necessary to correct any error of refraction which may exist. The adjustment of glasses for such patients is fully as important as any local remedies which you may resort to. You will find that cases of this kind, in which the disease has existed

perhaps for years, will rapidly improve after proper glasses shall have been prescribed. I have also found of great value in these cases a stimulating lotion composed as follows: *R.* Spir. vini gallici, spir. lavand. simpl., aa f 3 ss.; spir. rosmar. simpl., f 3 iij. *M.* Sig.—Apply to the lids morning and evening.

Do not forget to tell the patient that when applying this lotion to the lids the eye should be tightly closed. If, however, any of it should get into the eye it will cause considerable smarting; but it will do no harm. If you will tell your patient to allow a few drops to evaporate from the palms of the hands, holding the hands up to the eyes, opening and closing the eyelids so as to allow the vapors to come in contact with the free edge of the lids very thoroughly, it will produce a better effect.

In those cases of inflammation of the free edge of the lid where there is a certain amount of redness remaining, all active inflammatory process, however, having subsided, a preparation of the following kind will have a good effect: *R.* Ol. cadini, gtt. v.; ungt. simpl., 3 j. *M.* Fiat unguent. Sig.—Apply at night.

All these ointments should be used at night. If it be applied to the free edge of the lid during the day, some of the grease is very apt to get into the eye and produce slight disturbance of vision. The ointment should therefore be cleaned off the lid the next morning by washing with water containing a little bicarbonate of soda or Castile soap.

You will occasionally meet with very chronic cases of eczema of the lid, and in these cases it may be necessary, especially in adults, to give arsenic. For this purpose you may employ either Pearson's or Fowler's solution. If you do not wish to tell your patient to use simply so many drops of Fowler's solution, a very nice vehicle will be found

in syrup of ginger: *R.* Liq. potassii arsen., $f\ \frac{3}{4}$ iss.; syrapi zingiber., $f\ \frac{3}{4}$ iij. *M.* Sig.—One teaspoonful three times a day after meals. For children, the amount of arsenic should be diminished, one minim three times a day being sufficient.

It is hardly necessary to tell you, gentlemen, that in children of a scrofulous constitution, you should give cod-liver oil combined with the iodide of iron: *R.* Syr. ferri iodidi, $f\ \frac{3}{4}$ ss.; ol. morrhuae, $f\ \frac{3}{4}$ iv.; syr. zingiber., $f\ \frac{3}{4}$ ij. *M.* Sig.—A half to one teaspoonful three times a day.

If this be well shaken, the cod-liver oil will be found to be very much disguised by the ginger syrup.

Where there is much of an eczematous condition, with an abundant formation of yellow crusts, I have found calcined magnesia with rhubarb of great service: *R.* Magn. cal. pond., 3 iss.; fl. ext. rhei, $f\ \frac{3}{4}$ ii.; ess. zingib., $f\ \frac{3}{4}$ ss.; aq. anisi, $f\ \frac{3}{4}$ iv. *M.* Sig.—One drachm three times a day before meals.

Some cases of blepharadenitis are due to traumatism, but usually in these cases the injury to the lid is comparatively insignificant, the injury to the eye being, as a rule, of greater importance. Among injuries of the lids are burns, and these are treated with great advantage with a weak solution of creosote: *R.* Creosoti, gtt. v.; aquae, $f\ \frac{3}{4}$ iv. *M.* Sig.—Apply to the eyelid.

If the burn affect the eyeball as well as the free edge of the lid, it will be necessary to prevent adhesion of the edge of the lid to the eyeball (symblepharon). The use of a preparation which contains a very thick oil—such, for instance, as castor oil—is of special service.

In most cases the cornea is also affected, and for this reason I combine castor oil with atropine. As it is necessary to have the oil in its purity, not

mixed with water, the solution should be prepared in the following manner: *R.* Atropinae purae, gr. ij.; ol. ricini, $f\ \frac{3}{4}$ j. *M.* Sig.—Apply one drop to the eye every hour.

The druggist should not dissolve the atropine in a few drops of water and then mix with the oil, because in this case the effect of the oil would not be as great as if it were free from water. The atropine should be dissolved in a few drops of alcohol, and then mixed with the oil, and then the whole slightly warmed so as to have all the alcohol evaporated. In that case you get a perfectly clear solution of the atropia in the castor oil. If this be applied, say one drop every fifteen minutes or half-hour, not only will the burn of the free edge of the lid be speedily relieved, but the formation of symblepharon will also be prevented.

DISEASES OF THE SKIN.

A Case of Universal Psoriasis.

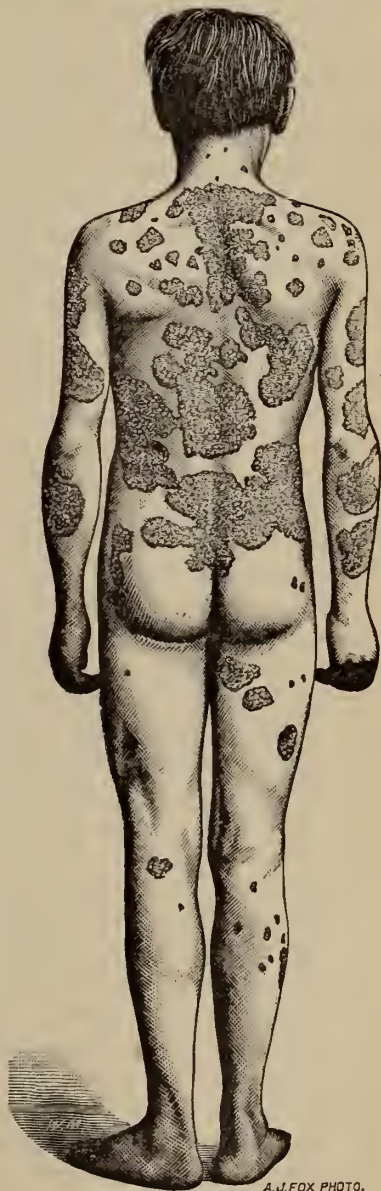
Prof. A. H. OHMANN-DUMESNIL (*St. Louis Cour. of Med.*): The following case is an interesting one merely from the fact that it is typical in some respects and departs from the general rule in others. Besides this, it is of some interest to the general practitioner who has few opportunities to observe such cases, and at times is likely to commit an error by relying too implicitly upon loosely made statements or impressions which are fallacious. The case about to be described is one which illustrates the disease in a thorough manner and yet hardly possesses a sufficient number of peculiarities to prevent one, unacquainted with its various forms, from making a too hasty diagnosis or a faulty one.

The patient, F. M., aged 23, of medium height and build, called at the dispensary, saying that he had a "break-

figures 2 and 3, he is considerably affected. The scalp is the seat of the disease, which, however, is covered by

FIG. 2.

FIG. 3.



A.J. FOX PHOTO.

Front and Rear View—taken from a Photograph—of a Case of Universal Psoriasis.

ing out" on his skin. He showed his arms, and upon request stripped off all his clothing. As will be seen from the hair. Taking a front view of him, patches are seen about the right clavicle, on the arms and forearms, the

chest is well covered, whilst the abdomen has less. The legs are comparatively clean, but a few small patches existing. The back is literally covered, as also the posterior aspect of the arms, the nates being free, whilst the legs have a larger number and larger patches. The palms have a number of patches, the size of a dime, the soles having none. The history of the case is that he first noticed some red spots coming out on his arms, and these soon covered with scales and became larger. Then other spots appeared in different parts of his body. He has had this affection nine years. No one in his family ever had it; nor can any history of syphilis, either hereditary or acquired, be made out.

The patches are irregular in size, shape and distribution. They are sharply defined against the normal skin, which is of a medium fine texture. The epidermal scales are heaped up in masses, a quarter of an inch in thickness and of a dull grey color. They separate easily and are not accompanied by pain, the only subjective symptom being a slight itching. The patches are surrounded by a bright red ring, composed for the most part of small papules, whose brightness of color is rendered greater by contrast with the skin and the scales.

SYMPTOMS.—In regard to subjective and general symptoms, very little can be elicited. He eats well, sleeps well, never notices anything out of order, except an attack of itching, which does not last any length of time. He never had rheumatism, has always been healthy, and is now working steadily. He is fearful that his face will be attacked, as the disease has progressed down his scalp and involves a part of his forehead. The objective symptoms are typical in one respect, as far as size and shape are concerned. The fact,

however, that the scales are not of that white, pearly lustre so commonly described might lead a tyro into error. Again it will be observed that the flexor surfaces are as much involved as the extensor, more so in the legs. Besides this, the fact that there exists a psoriasis palmaris might lead to a suspicion of syphilis, as the palms is an unusual if not rare seat for this affection, and yet in such a general involvement of the surface it is nothing but natural that they should also be attacked, although there is no probability that the face will ever become the seat of the disease.

Fracture of the Penis.

In the *New Orleans Med. and Surg. Jour.*, Dr. H. A. VEAZIE reports the case of a young man who met with this accident during coition. On examination, it was found that the penis had been broken through and through, except the cutaneous covering. The two fragments could be moved upon each other, and on making traction, a distinct sulcus could be felt at the seat of the break, which was about an inch and a half back of the corona—the urethral spongy body and the corpora cavernosa all evidently broken through. His urine was drawn off, quinine and opium given, and incisions made through the skin to give exit to the extravasated urine. The next day he had high fevers and severe rigors. Sloughing occurred in patches, none larger than a half-dollar piece. A disinfectant lotion of liq. sodæ chlorinat. was applied to the penis, and he was instructed to draw his urine with a catheter when necessary. He made a good recovery, all openings healed well, but the distal fragment did not become erect until six months after the accident. The organ finally recovered its former usefulness. This was a case evidently of fracture of the healthy penis, there having been no disease of that organ up to the time of the accident.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

A Case of Congenital Tarticollis, with Fissure of Upper Lip.

Dr. JOHN D. S. DAVIS, (*Atlanta Med. and Surg. Journal*):

On March 20, 1884, Willie A., aged two years, of Talladega, Ala., was brought to my office for treatment of deformities which had existed from infancy. He was of healthy parents, and himself of good health other than trouble



FIG. 1.

alluded to. I found, upon examination, the right sterno-cleido-mostoid muscle involved. Bringing about this peculiar position of the head, as shown in Fig. 1, which was due to rotation of the head upon its axis, to allow the approximation of the origin and insertion of this sterno-cleido-mostoid muscle and single hare-lip of left side of upper lip extending into the nostril, I placed the head as nearly as possible in its normal position, carefully retaining it in that position. While the parts were thus kept on the

stretch, I made additional pressure with my finger upon the lower fourth of the sterno-cleido-mostoid muscle (the part most tense), which immediately produced reflex contraction, pain and spasm. I had Mr. Scholze take a photograph of the child (Fig. 1), and at once proceeded to operate. The head of the child was placed as nearly as possible in a natural position, and retained by competent assistants, without the use of an anæsthetic. While the muscle was in this way made tense, or put upon the stretch, I introduced a curved tenotomy knife flatwise, through the integuments, on the inner side of muscle, about three-fourths of an inch above the sterno-clavicular articulation; carrying the knife through the tissues slowly, closely hugging the sternal head of the muscle, and then carrying the blade flatwise as introduced beneath the muscle to near the external or posterior side of the clavicular head of the muscle; when I turned the cutting edge toward the muscle, and with a sawing motion severed both heads by one long incision through a single small puncture in the skin. The knife was then turned flatwise and withdrawn as introduced, at the same time following the point of the blade of my instrument with the finger of my left hand, so as to press out all the blood and to prevent air from entering the wound. The wound was then covered with a single strip of adhesive plaster, and the head held in position by passing a rubber strap under the axilla, and fastening the two ends of this strap to a linen roller bandage parted around the head and kept in position by a cross bandage over the head, connecting roller on either side. And right here I will say that in retaining my head support I always fix my bandage around head in the way just described, in preference to using adhesive straps attached to the

bandage and skin of forehead—thus allowing a removal at liberty and avoiding the unpleasantness of the plaster. The support was used until April 1st, 1884, when it was removed, and the head remained in a perfectly normal position.

On April 1st, my friend Dr. Merrill anæsthetized the patient for me, and I pared both sides of the fissure in lip and brought them together with two hare-lip pins in the usual way. Then I drew the sides of the face as far forward as possible, and retained in that position by means of adhesive strips passed over the pins and attached to cheeks as far as the ramus on either side. At the end of fifty hours the pins were removed and the face kept dressed with the



FIG. 2.

plaster until April 10th, when his face was undressed for Mr. Scholze to take a second photograph. See Fig. 2.*

I was inclined to perform both operations at the same time, but gave way to a wish of the father of the child for a

[*We are indebted to the Atlanta "Med. and Surg. Journal" for the use of these cuts. Also the cuts credited by mistake in our Dec. number to the "St. Louis Med. and Surg. Journal."]

postponement. I have reported the above case as one of interest to myself and my associates, inasmuch as every available appliance had been used on this child to correct the deformity, but very much to no avail, ere the child was brought to my observation, and that relief was had by one operation, almost free from pain and without scarcely a drop of blood.

Local Anæsthesia by the Hydrochlorate of Cocaine.

Dr. R. J. LEVIs thus writes in the *Med. News* :

In a double extraction of hard cataract there was no pain produced by the grasping of the conjunctiva in the fixation of the eyes, in the corneal incisions, and in the iridectomies.

A four per centum solution was freely brushed over the entire conjunctival surface three times, at intervals of ten minutes, and the operations were commenced in forty minutes after the first application. No irritation was produced, and the only sensation described was that of "numbness and hardness." The entire conjunctival surface seemed insensible to repeated pinching with the fixation forceps.

In a single extraction of hard cataract a four per centum solution was brushed over the ocular and palpebral conjunctiva, with the eyelids freely everted. Three applications were made at intervals of ten minutes, and the operation was performed at the lapse of twenty-five minutes. The patient asserted decidedly that she felt no pain whatever.

Preparatory to the operation for uterine procidentia and rectocele the vaginal and labial mucous surface was wiped dry, and a four per centum solution of the hydrochlorate of cocaine was thoroughly brushed over it. The

sensitiveness was tested at three intervals of ten minutes each, and the application was repeated three times. There appeared to be at no time any decided loss of painful sensibility, and the operation was finally performed under the anæsthesia of sulphuric ether.

For the removal of a rather large tarsal tumor, the ocular and palpebral conjunctiva and the exterior of the eyelids were brushed with the solution as previously used, at intervals of ten minutes, and the excision was performed at the lapse of forty minutes. The operation seemed to be as painful to the patient as if performed without an attempt at anæsthesia.

For the operation for lachrymal obstruction the application was made in the same manner and at the same intervals. The slitting of the punctum and canaliculus gave no pain, but the passage of the dilating probe down the lachrymal canal seemed to produce some uneasiness.

Prior to applying nitric acid as a caustic to a syphilitic ulcer on the tongue, the same manner and number of applications were repeated, the tongue having been wiped dry and held protruding between the teeth. No pain was produced on the thoroughly benumbed tongue.

Solidified Creosote.

In its application to carious teeth creosote is often inconvenient in consequence of its fluidity producing ill effects upon the mucous membrane of the mouth. This may be obviated by giving to it a gelatinous solidity by adding ten parts of collodion to fifteen of creosote. This, besides being more manageable than liquid creosote, also closes up the orifice in the tooth, preventing the access of air to the dental nerve.

Lympho-Sarcoma of Neck—Extirpation—Ligation Internal Jugular Vein—Recovery.

Dr. T. F. PREWITT. Henry Stahl, German, æt. 35, presented himself, July 30, 1884, with a tumor on the left side of his neck as large as a child's head, and having a striking resemblance to the human face from prominences and depressions, the result in part of cicatrices from a former operation. Patient had first noticed a tumor upon his neck something over two years before coming to me. In the following months it had grown to be as large as his fist. A prominent surgeon of this city then saw it, and as he states "lanced" it. Three weeks after the same surgeon lanced it



again, and in ten days or two weeks after this removed it by operation. The growth subsequently returned and is now larger than when removed one year ago. Patient stated that at times there was some pain in it, and it interfered somewhat with deglutition from pressure upon esophagus. As will be seen from the accompanying cut, it was somewhat irregular in outline. It was solid and firm throughout the greater portion of its extent, but at one or two points presented an elastic semi-fluctuating feeling.

The integument moved freely over the surface of the tumor except at cicatrix of former operation.

The tumor extended from the lobe of the ear to the clavicle and from near the median line in front to near the median line posteriorly.

The circumference of the neck over the most prominent part of tumor was eighteen inches. From median line in front to median line posteriorly on left side, the measurement was twelve inches; on right side it was six inches. A line passed over the surface of the tumor from the base anteriorly to base posteriorly, measured nine and three-fourths inches; up and down it measured eight and one-fourth inches.

The patient, who had already begun to look somewhat pale, was anxious to have the tumor removed.

From the history of the case and the clinical features, a diagnosis of lymphosarcoma primarily was made. The prognosis was most unfavorable, but as an operation presented the only hope of prolonging his life, it was decided to attempt it. It was certain that it dipped deep down into the neck, and it was probable that it was in intimate relation with the great blood-vessels. This seemed the more probable as it was a recurrent growth. Still there was sufficient mobility to warrant the hope that it might be dissected from important vessels and nerves and its removal accomplished.

July 2. An anæsthetic (ether) having been given, elliptical incisions were made to include the adherent and scarred tissue, extending from the ear to the clavicle. As the operation progressed, it was found that portions of the overlying muscles—sterno-cleido-mastoid and trapezius—were adherent to and blended with the growth, there being no distinct capsule. An irregular cyst was

cut into at a point in the tumor corresponding to the fluctuation upon the surface.

Numerous small vessels were tied, and as the base of the tumor was approached the utmost caution was exercised to guard against injury to the large vessels; nevertheless, while cautiously detaching the tumor from these with the handle of the scalpel, a sudden gush of dark venous blood, announced the most unpleasant fact that I had wounded the internal jugular vein. My own finger thrust into the breach, was replaced by that of an assistant and the dissection continued. When the whole mass had been removed, the jugular vein was compressed above and below, and a gaping wound a half inch or more in extent was found in its walls. A silk ligature was thrown around the vessel above and below, and it was then found that blood came from another breach in the walls at the junction of the facial veins. This required another ligature of the jugular above, and one of the tributary vessels. In spite of the vascularity of the parts, the extensive dissection, and the twice wounding of the internal jugular, the patient did not lose more than six or eight ounces of blood. The parts were now carefully washed with a ten-grain solution of carbolic acid, a drainage tube laid in the bottom of the wound and the edges carefully approximated except at the lower extremity, where it gave exit to the drainage tube.

Antiseptic dressings were then carefully applied, and the patient put to bed.

August 4, 1 P. M. Found patient sitting up at the table eating as though nothing was the matter with him and looking perfectly well. Pulse 76, of good volume; temperature 99.6°, appetite good.

August 5, 1 P. M. Pulse 72, temperature 98.6°; says he is all right. No discharge from the wound, dressing not disturbed. Insinuated a pair of forceps under the dressing and removed the drainage tube.

August 6, 1 A. M. Temperature 106.4°; feels well; has been eating a little meat.

August 8. Temperature 99°, pulse good; removed the stitches; union throughout the greater portion of the wound.

From this time the progress of the case presents nothing of importance, and the patient left the hospital in August.

No cerebral disturbance followed the operation.

The dread of ligation of large veins once so prevalent in consequence of the teachings of Travers, Lisfranc, Langenbeck, Pirogoff and others, has not yet disappeared from the minds of the profession. The exigencies of the case so rarely demand the ligation of veins that we are not familiarized with the effects, as is the case with arteries. Yet the frequency with which the femoral and internal jugular veins have been tied with impunity—not to speak of those of less size,—demonstrates that the procedure is as safe, all things considered, as is the ligation of arteries.

The injury of the veins which demands a decision of the question as to ligation or compression for the control of the hemorrhage is more likely to be followed by pyemia in the attempt to control it by compression than by the ligation. In fact the ligation of the vessel, *per se*, does not lead to pyemia, nor need we fear apoplexy as a result of obstruction of the venous return from the brain, where only the internal jugular vein of one side is tied. The real danger as pointed out by Prof. S. W.

Gass in an admirable and exhaustive essay upon "Wounds of the Internal Jugular Vein" (*American Journal Med. Sciences*, January and April, 1867), is the same as that following the ligation of arteries—secondary hemorrhage. A microscopic examination confirmed the diagnosis of sarcoma.

Opening of Mastoid Process.

Dr. SCHWARTZE, of Halle, at the International Medical Congress, discussed the operation of opening the mastoid cells, and gave the following as indications for operative interference:

1. In acute inflammation of the mastoid apophysis with retention of pus in the bony cells, if, after the application of antiphlogistics and Wilde's incision, the œdematous swelling, the pain, and the fever have not subsided.

2. In chronic inflammation of the apophysis, with subcutaneous or subperiosteal abscess, or mastoid fistula, and in this case even when symptoms do not exist of a nature to compromise life.

3. When, the mastoid being normal externally, there exists a cholesteatoma or a purulent collection in the middle ear, which cannot be removed by ordinary methods, and when serious symptoms arise, or if an abscess from congestion is formed in the posterior wall of the auditory canal.

4. The external surface being healthy, and in the absence of purulent collection in the middle ear, if the apophysis is the site or point of departure of headaches intolerable and persisting for a long time, against which other remedies have been employed without effect.

The operation is of doubtful expediency in chronic incurable otitis media, where signs of mastoid inflammation are wanting and there is no re-

tention of pus in the middle ear. The operation is contraindicated when there is certainty of metastatic abscesses being already formed, or in the presence of a secondary meningitis, or of an abscess of the brain.

Conclusions.—1. The operative opening of the mastoid apophysis is a valuable remedy against some of the gravest and most dangerous diseases of the ear. 2. The danger of the operation should be considered as light in comparison with that of the disease which it is intended to relieve.—*Annales des Maladies de l' Oreille, etc.*—*Md. Medical Journal.*

Restoration of Gums About Loose Teeth.

Dr. WILLIAM HERBERT ROLLINS, in *Boston Medical and Surgical Journal*, says: The formation of pockets between the roots of teeth and the surrounding tissues is one of the most troublesome conditions which the dentist is called upon to treat. As present methods of treatment are seldom satisfactory, some may think the following one worth trying: Only one jaw should be worked upon at a time. An impression of this should be taken a week or more before the operation, and a plate struck to cover the teeth. It is not always necessary for this to cover all the teeth. In many cases it can be fitted about the sides, leaving the crowns bare.

The teeth are then cleaned with sharp instruments, and the edges of the alveoli scraped in the ordinary way. All the debris is to be carefully syringed out from between the roots and the surrounding tissues, after which the following solution is to be injected into the pockets. $\mathcal{R}$. Thymol, 10 grammes; absolute alcohol, 100 grammes; mix.

Fine sponge, which has been soaked in a germ-destroying solution and then

dried, is next to be cut into pieces, moistened and carefully placed in the largest pockets, as, for example, those often seen between the molars, where, it is evident, that by the ordinary treatment we could not get a restoration of the lost tissues. The solution already given, if diluted with ten times its bulk of alcohol, answers as well as another for treating the sponge.

The metal cap, made of proper shape to allow of new tissue growth about the denuded roots, is now placed in the mouth, and the patient is sent away, after directing him to remove the plate at least six times a day, in order thoroughly to rinse his mouth with whatever simple wash may be prescribed.

Each day for the first week the pockets should be thoroughly cleaned by injecting into them, by means of a fine-pointed syringe, the following solution: $\mathcal{R}$. Nitro-sulphuric acid, gramme 1; water, grammes 100; mix.

During the second and third week the same treatment is to be followed by the patient, who should be seen every third day, to have the injections repeated at the necessary points. After this the plate can be taken out of the mouth. This treatment is sometimes quite successful.—*International Review.*

Salivary Incrustations on Dental Plates.

Dr. JAMES CRAIG, of Jersey City, N. J., thus writes in the *Dental Cosmos*: "The methods usually resorted to in removing salivary deposits from dental plates are mechanical, viz., by scraping, consuming considerable time, and friction with a wheel-brush. The method I have adapted is simple, and may be considered a chemical one. The saliva, having an alkaline reaction, its salts being principally sodium, calcium, and potassium phosphates, forms a deposit

that may be removed by using a solution of carbolic acid from 3 to 5 per cent., the strength depending upon the thickness of the incrustation. The carbolic acid being antiseptic and non-corrosive in the strength mentioned does not injure the plate, but keeps it sweet. Theoretically, the carbolic acid, combining with the alkaline bases, forms carbolates, thereby loosening the deposits. By immersing the plate on retiring at night, and allowing it to remain in the solution until the following morning, the incrustation is easily removed by a flow of water from the faucet and gentle friction with a tooth-brush.—*Med. & Surg. Reporter*.

A Good Tooth Paste.

Dr. A. W. HARLAN, of Chicago, recommends the following, in the *Dental Cosmos*: R. Precip. chalk; powd. orris root, $\bar{a}\bar{a}$ $\bar{z}$ ij.; white castile soap; powd. borax, $\bar{a}\bar{a}$ $\bar{z}$ ss.; powd. myrrh, $\bar{z}$ ii.; honey and glycerin, q. s. to make a soft paste: color rose pink; perfume to suit. To be used before retiring and after breakfast, on a brush not dipped in water and not too stiff.—*Ibid*.

Treatment of Nasal Polypi.

As a valuable contribution to the therapeutics of this unpleasant condition, we are glad to note that Dr. RICHARDSON, in the *Asclepiad*, recommends the use of sodium ethylate in the treatment of nasal polypus. The caustic agent is applied by means of a probe made of soft cotton-wool, twisted into shape on the points of a pair of forceps. This cotton probe is saturated with the ethylate, and then plunged into the substance of the polypus. On removing the cotton it commonly happens that the patient can expel the whole mass of destroyed polypus, in a semi-fluid form,

by blowing the nose sharply. A second application ought to be made with a view of destroying the base of the polypus. The mode of action is said to be sufficiently clear. The ethylate is decomposed by contact with the water of the polypus into caustic soda and alcohol; the latter coagulates the albuminoids, and the former acts as a powerful caustic. With the exception of some burning pain, no unpleasant effects seem to follow the use of this method.—*Ibid*.

Operative Treatment in Intestinal Obstruction.

In the first Harveian Lecture (*Brit. Med. Jour.*), Mr. THOMAS BRYANT lays down the following rules for operative treatment:

1. Laparotomy should be undertaken as soon as the diagnosis of acute intestinal strangulation is made. There should be no delay allowed for the formation of a specific diagnosis of its cause. It should likewise be proposed in all cases of acute intussusception, and of chronic, which have failed within three, or, at the most, four days, to be relieved by other treatment.

2. In all operations of laparotomy, it is to the cæcum that the surgeon should first advance, since it is from it he will obtain his best guide. If this be distended, he will at once know that the cause of obstruction is below; if it be found collapsed, or not tense, the obstruction must be above. Adhesions or bands are, moreover, more frequently near to, or associated with the cæcum, than with any other part of the intestinal tract. It is also in the right iliac fossa that the collapsed small intestine, in cases of acute strangulation, is usually to be found; and, with this as a starting-point, the surgeon will have less difficulty in tracing up the intestine

to the seat of strangulation than if he begins at a distended coil, when it will be a matter of chance whether he travels away from or toward the special object of his search—the seat of obstruction.

3. In a laparotomy, when the strangulated coil of bowel is gangrenous, it should be brought out of the wound, and the gangrenous knuckle resected. The proximal and distal ends of the resected bowel should then be stitched to the edges of the wound, and an artificial anus established.

4. Nélaton's operation of enterotomy should be undertaken in all cases of intestinal strangulation, when laparotomy is rejected or seems inapplicable, as well as in cases of intussusception in which the invaginated bowel cannot readily be released. It should be performed in the right groin, or, rather, right iliac fossa.

5. If laparotomy succeed, the cause which called for it is removed, and the normal action of the bowel is restored. If resorted to early, and as a rule of practice, it is probable that it would be more successful than the treatment by opium, inflation, or purgatives, which has hitherto been in vogue.—*Medical and Surgical Reporter*.

Boracic Acid Oil in the Treatment of Burns.

In the *Brit. Med. Jour*, Dr. C. J. BOND says it is now a year since he began to use boracic acid oil as a dressing for burns at the Leicester Infirmary, at first simply in the form of a mechanical suspension of the powdered acid in olive oil. He has found that 18 grains of powdered boracic acid dissolved in a drachm of hot glycerine, and added to an ounce of olive oil, forms a kind of imperfect emulsion, the glycerine retaining the acid in solution when cold.

This can be easily shaken up with the oil. This makes a non-irritating and doubly antiseptic dressing, and extensive burns treated thus, and covered with a layer of some antiseptic wool, require to be disturbed but seldom, and if not perfectly aseptic, are far "sweeter" than when dressed with, for instance, the carron oil.

As a lubricant for catheters, sounds, etc., this boracic oil with glycerine possesses advantages. It is superior to olive oil, because of its antiseptic property; and better than carbolic oil, because it is less irritating and much more stable; boracic acid being non-volatile. Glycerine itself, too, is a dressing of considerable value by virtue of its dehydrating power.—*Ibid*.

A Cure for Nitric Acid Burns.

Prof. A. IRVING, in the *Chemical News*, recommends the use of a dilute solution of sulphurous acid as an application to surfaces burned by nitric acid. He claims that this solution will speedily reduce the caustic action of the nitric acid, thereby arresting pain and cutting short any further destruction of tissue.

New Mode of Localizing Bullets.

In the transactions of the Vt. Med. Soc., Dr. S. J. ALLEN says:

"Perhaps I may be pardoned if I say, that during the four years of the war I served in the field one year as surgeon of a regiment, two years as Surgeon-in-Chief of a division, and last year as Medical Inspector of the Sixth Corps, and must have seen and examined, if not treated, many gun-shot wounds. In all I have examined, be they more or less in number, I never localized a dozen bullets with a probe.

"In nearly all not localized by the

finger or sense of touch, I succeeded in fixing with certainty their exact location by the use of the exploring needle.

"I claim that if the bullet did not enter either of the cavities of the body, but lays anywhere in the periphery among the muscles, or other tissues exterior to them, the exploring needle, in the hands of the surgeon, will, by puncturing a reasonable number of times, hit the ball, and convey the intelligence of its exact location.

"Had the exploring needle been used in the case of our late President, the 'encysted wad of pus in the right iliac region' would have been punctured without appreciable resistance, and his surgeon saved the Blissful diagnostic error contained in several of their bulletins, which located the fatal bullet at that exact point with absolute certainty.

"A serviceable instrument for this purpose will be found in the smallest sized exploring needle, with which, all will admit, it is quite safe and comparatively painless to make the puncture.

"It is not unusual to puncture not only the peritoneal cavity, the pleural cavity, and the bladder, but the intestines, and the pericardium, and seldom has harm resulted.

"The probe should be used only to determine the direction the ball took from its point of entrance, and to ascertain if it entered a cavity. Here, I claim, its usefulness ends, and if further used does harm.

"The surgeon almost always has an impression, after an examination, that the ball lies at a certain point. To test this impression, push the exploring needle from the surface directly down to this point. If it does not hit the resisting bullet, try at the next most likely point. If not successful try again. The bullet can be localized in this way many times where all other methods fail.

When the needle hits the ball, the surgeon will make the counter incision for its extraction with perfect confidence.

"Supposing that the bullet lies in close proximity to a bone, or is flattened upon a bone, by using a little more force, the point of the needle will be made to penetrate the ball slightly, and will stick a little, and thus convey to the surgeon's hand a sensible difference between bone and lead."—*Med. and Surg. Reporter*.

Contused Wounds.

It is said that the application of a decoction of valerian root, an ounce to the pint, often relieves completely the pain of contused wounds.—*Medical World*.

New Modification in the Antiseptic Dressing.

Since LISTER published his observations on antiseptic dressings, the method has come into universal use, not only by the surgeon, but by the practitioner of general medicine. It is, however, not so much the exact method of Lister that surgeons have carried out, as the principles, such as prevention of infection, careful disinfection, drainage for the secretions, and the careful arrest of hemorrhage before the wound is closed. If these principles are not properly carried out, it matters little how many layers of gauze and bandage are put around the wound. The reformation was made largely by Bardeleben, and at the present time nearly every surgeon has modified the dressing to suit himself on the case in hand. With some the spray is still retained. Lister himself did not adhere to the method he first advocated.

The spray apparatus has nearly disappeared, although with some it is used before the operation on the region to be operated upon. The catgut liga-

ture is not employed a great deal, most surgeons preferring Czerny's disinfected silk, which is preserved in a 5 per cent. solution of carbolic acid. In Germany catgut is preferred. Billroth used a combination of iodoform and carbolic acid as a dressing. Instruments and drainage tubes are soaked in a 3 per cent. solution, and the wound is washed with a solution of the same strength. The next step is to put on a few layers of iodoform gauze, and finally carbolized gauze; over all this a layer of "Billroth's batist;" the whole is enveloped in absorbent cotton. The therapeutic result of this dressing need scarcely be pointed out. Albert makes use of nearly the same dressing. Mosetig uses iodoform exclusively as a dressing. Wounds of cavities are filled with iodoform powder. Toxic symptoms have until now not been noticed at this clinic. Hofmalk is employing the sublimate dressing, of which little can be said as yet.

Now, I wish briefly to call attention to the method employed at the Garrison Hospital No. 1. In the largest number of cases carbolized gauze is used in operative wounds of the rectum, genitals and mouth; and in gunshot wounds iodoform gauze is taken. The carbolized we prepare ourselves by drawing the ordinary gauze through the following mixture: *R.* Resinæ, 1500.0; spiritus vini, 8000.0; acidi carbolic, glycerine, āā., 500.0. *M.* The material is then dried and cut into suitable strips and preserved in tin boxes. The wound is irrigated with a 5 per cent. solution of carbolic acid, and silk ligatures are used. The sponges that are used during the operation are specially prepared before they come in contact with a wounded surface. The surgical clinic conducted by Schede, of Hamburg, is undoubtedly the largest institution of the kind in the

world. It has 500 beds, and since it has become impossible for him to control this vast amount of material, he has appointed assistants, one for 200 beds, receiving all the cases that are suspected, that are not aseptic, such as phlegmon abscesses, boils, etc. This department he seldom visits himself unless in more than ordinary cases. The remaining 300 beds are divided into three sections, of 100 beds each, under the direct supervision of an assistant. One of these sections is visited daily by Schede, so that he completes his rounds in three days. Carbolic acid is employed to disinfect the instruments. Aside from this a solution of sublimate is used for the hands, sponges, drains, ligatures, and for the irrigation of the wounds. The assistants claim that the finger nails are affected by this solution. 1:1000, while the sponges become brown and rotten. The dressing is exclusively the sublimate, in 10 per cent. solution.

The technicality of the dressing is a little different in every surgeon's practice, but we cannot refrain from calling attention to the fact that so many cases are reported at present, especially where the sublimate solution is used, where the patient recovers without a reaction even, as Fillembaum mentions that he saw a series of ten cases of hip-joint resection by Schede in the ward at one time (all children) and that all recovered without any reaction. The room for operation is small but handy. Before each operation the steam-spray apparatus is in operation for some time (with a sublimate solution). After every operation the room is absolutely inundated with water, completely flooding everything. Esmarch, at Kiel, whose name is known all over the world, employs a solution of chloride of sodium, 6:1000; does not use sponges

during the operation. The instruments are all made out of one piece of metal; do not contain slides or catches, since all these rough points can carry contagion. Every patient put on the table for operation is stripped naked, only covered by a rubber cloth. E. uses decalcined bone-drainage tubes, which need not be removed since they are absorbed. The continuous suture is largely used, and the wound completely closed, and new openings made for drainage. The bandages are sprinkled with a solution of sublimate.

Bergman does not use sponges, but cotton saturated in the sublimate solution in little pledgets, which is also used to saturate the gauze for bandages.

Bardeleben combines carbolic acid and sublimate, but he still retains the use of sponges.

Volkman employs carbolic acid exclusively for instruments, as an irrigant and to prepare the bandages. Until now there has not been a case of erysipelas reported caused by sublimate. Symptoms of intoxication can occur whether we use carbolic acid, iodoform, or sublimate, but in either instance the latter is more desirable.

To use "charpie" made from old linen, that has been worn for years and washed frequently as a dressing, as has been ordered to be used by the military hospitals of France, there cannot even be a claim to antiseptics in the principle. — *Wiener Med. Wochenschrift.* — *Therap-Gazette.*

DISEASES OF THE SKIN.

The Treatment of Acne in the Male by the Cold Urethral Sound.

Dr. SHERWELL, of Brooklyn, believes that acne and rosacea, either alone or combined, depend in almost every

instance upon conditions reflected from the sexual or digestive apparatus, and in the relative order as given; and that even the red face and nose of the coachman, of whom Hebra speaks, are only intensified, not created, by the external irritation of biting winds, etc. His theory of the etiology of the more pronounced forms of acne, as the tubercular variety and rosacea, is that nine out of ten cases are caused by congestion of the mucous membranes of some of the viscera spoken of, probably passive in character. Why they should be reflected upon the face he does not know, and can form no opinion, any more than he can in urticaria, which arises, in his belief, from a more active and ephemeral but similar condition of the gastro-intestinal mucous membrane in the same relative number of cases. He thinks it probable, however, that the mucous irritation and consequent congestion is situate higher up in the alimentary canal in urticaria. In these cases, too, it might be difficult to explain why the efflorescences are almost always situate on the trunk and limbs. It will be seen in the foregoing how far he is removed from the Marsyan-like dogma of the Viennese school, and not alone in respect to these diseases, but in regard to others, as, for instance, eczemas of the infant or child; in those cases he pays quite as much attention to the *primæ viæ* as to the skin, considering the trouble as springing very often, if not generally, from gastro-intestinal irritations. In short, he believes in the complete analogy between the skin and mucous membranes, and thinks their reflected action is much more common and important than many authors would have us believe. He recommends in persistent cases of acne and rosacea in the male subject the use of the cold urethral sound, and that too

with some degree of diligence. He does not, of course, mean by this that proper topical measures to the parts affected are not to be used in conjunction therewith; or that tonic, cathartic, dietic and hygienic measures and principles to meet common-sense indications should be omitted.—*Journal Cutaneous and Venereal Diseases.*

Treatment of Dandruff.

M. VIDAL uses the following pomade in the treatment of dry seborrhœa of the scalp. Precipitated sulphur, one-half ounce; balsam of Peru, one-half drachm; cocoa butter, three drachms; castor-oil, one and one-half ounce. The proportions of the cocoa butter and castor-oil should be varied according to the season to obtain a pomade of the desired consistency.

VENEREAL DISEASES.

The Treatment of Hydrocele by Incision and Suture.

Prof. HAL C. WYMAN (*Michigan Med. Age*): Twelve years ago I treated my first case of hydrocele. The patient was an old man seventy-two years of age, robust and vigorous. Had seen the treatment by tapping and injecting the sac with iodine tincture, tried several times in the clinic where I studied, and remembered that our professor of surgery had extolled that method as the best. My patient was old, and I was a little timid about washing out his tunica vaginalis with such a strong irritant, so I deferred doing more than simply drawing off the fluid with a trocar until I had time to consult some of the written authorities on surgery, and talk with more experienced practitioners of my acquaintance. In a few weeks the sac

had refilled, and the old man clamored for a cure, saying: "The more you tap it, doctor, the more you will have to." My studies had led me to the belief that I could not do better than to follow the stereotyped rule and inject iodine; this I did, taking care to withdraw almost as much as I had thrown into the hydrocele, after drawing off a pint of straw-colored fluid. No great pain was experienced. I left the patient with a quarter of a grain of morphine, which he was to take when the pain became severe. At my visit on the next day I was surprised to find the scrotum greatly swollen, and my patient suffering great nausea and depression. I resorted to all available remedies to control these symptoms, but to no purpose. He progressed from bad to worse. Thin, sanious pus infiltrated the tissues of the scrotum, necessitating large incisions. After two weeks of intense suffering, death came as a relief. Now, the natural history of hydrocele does not comprise any such serious situation as treatment by injection with iodine, provoked in this case. I thought the age of my patient was to blame for the sad turn in affairs. A few months later a young man came under my care whose right tunica vaginalis was filled with fluid. He wanted to be cured. Dr. ———, in a neighboring village, had tapped him several times, and he was tired of such treatment. He was young and elastic in tissue. I thought him a suitable subject for treatment with iodine injection. Accordingly, I threw into the sac half an ounce of this strong tincture, taking care to traverse all the tissues of the hydrocele wall with the canula, so that no iodine could extravasate the meshes of the scrotal connective tissue. He suffered severe pain. I feared he would die from shock. His scrotum swelled enormously. Pus formed. Ab-

scesses in scrotal tissue and sac of hydrocele were evacuated by incision, repeatedly. Months elapsed before he recovered his health. I questioned the propriety of treating another case in the same way. But as years passed other cases presented. Some were treated by seaton; others by incision and with uniformly good results by the latter method. However, the treatment by iodine injection was so simple in execution and so uniformly praised by other operators that I was so constrained to resort to it again. This time results were better. In the years last passed I recall but one case in my own practice when this treatment has been followed by disastrous results, but it has often failed to effect a cure.

Among my brother practitioners I have heard of many cases doing badly after the iodine treatment. Now, I desire in this paper to protest with the full force of my experience, against the treatment of hydrocele by injection of iodine. That experience comprises every variety of the disease. The hydrocele with thin wall often tolerates the treatment well, but those cases where there is great thickness of the tunica vaginalis resulting from sub-acute inflammatory processes, and those cases where the sac contains masses of fine fibrinous coagula, are not suitable cases for iodine injection. In every such case the treatment by iodine is at the imminent risk of the patient's life. The discrimination of cases that will tolerate the iodine with safety cannot be guided by rules of diagnosis, with any degree of certainty, and hence because of the fatality of the results in such instances and the frequency of failure to cure in others, the method ought to be abolished, and the older treatment by incision adopted in its stead.

A plan which has uniformly succeeded in my hands consists in making an incision one inch and a half in length through the investment of the hydrocele into the sac and then fastening by interrupted suture the internal membrane of the hydrocele to the integument of the scrotum. I have operated on old men after this method, and have seen them soundly cured without suffering more constitutional disturbance than results from tapping.

Syphilis Hemorrhagica Neonatorum.

Occasionally cases are met with in the new-born where ecchymotic spots make their appearance in the skin, and a more or less profuse hemorrhage sets in from the umbilical stump. Authors in general have inclined to the opinion that these cases belong to the class of hereditary syphilis, and the disease, which seems invariably to have a fatal issue, has been called hemorrhagic syphilis of the new-born (*syphilis hemorrhagica neonatorum*). But recently more than one author has expressed himself against this view, and Dr. PETERSON, who reports such a case in the *Vierteljahrschr. f. Derm. und Syph.*, 1883, p. 509, is positive that the symptoms mentioned never indicated a luëtic diathesis. In his case the child had the ecchymotic spots, suffered from hemorrhage of the umbilicus, and died. The post-mortem revealed as cause of the disease septic infection. The infant had been affected by a septic umbilical phlebitis, and from the thrombosis of the umbilical vein emboli, consisting of mykotic masses, had been carried into the lungs, to the skin, etc., and given rise to the hemorrhages in the usual manner, *i. e.*, after the embolus had occluded the terminal artery, the blood flowed back to the next open breach, and directly into the vein, there driving the blood backwards,

and thus causing hyperæmia and venous stasis, with its attending capillary hemorrhages.

Thus far there has not yet been given any proof that the condition described may be caused by hereditary syphilis, and it is more than probable that a similar cause to that in P.'s case generally produces the ecchymotic spots as well as the umbilical hemorrhage. The decision of the case is very desirable, as the treatment would depend upon the pathogenic element and a grave suspicion be removed from more than one parent.—*Med. and Sur. Reporter.*

For Restoring the Powers of the Sexual Organs.

℞ Acid. phospor., dil; tinc. nucis vom., āā 3 ij.; tinct. cannab. Ind., ʒ j.; Elix. calisaya, q. s. ft., ʒ iv. M.—Sig.: Teaspoonful every three (3) hours.—*Med. Herald.*

Firm Union of Prepuce to Glans Penis.

Dr. J. R. LEMEX (*St. Louis Med. and Surg. Journal*): A. H., aged 32, commercial traveller, when he first presented himself to me, was in fair health and able to attend to his business very well. He, however, complained of being quite nervous, which has always occasioned him some trouble. Patient when a child was always delicate and for this reason was kept in the house and not allowed to engage in boyhood's sports. He, himself, says that he was raised as a girlish boy, preferring to play with girls rather than with boys. He consulted me, February 15, about an inability to retract the prepuce. Upon examination of the penis I found that this was due to the fact that the prepuce was firmly united to the glans penis as far forward on right side as to within two lines of the meatus and probably three lines of meatus on left side—leaving but one-

fourth of glans free. The glans was poorly developed, and when erect the penis was deflected to right side. When he attempted to have intercourse the entrance could not be made before emission would take place. I found upon inquiring that the patient had never been able to retract the foreskin to a greater extent than at the present time. He has worried about the condition since he learned that it was not normal. His appearance before the operation indicated that he was intensely worried; and, although he is naturally a nervous fellow, this condition has in all probability increased it. I recommended circumcision, first advising him to allow me to loosen the foreskin from glans. He readily consented, and expressed himself as willing to undergo any operation that would cure him. I placed patient on a table and attempted to force the foreskin back, but found it so firmly united that I was compelled to dissect the foreskin loose from the glans penis—as far back as the corona glandis. I retracted it and dressed it with iodoform and lint daily. It healed kindly in a few days, and, when well I found that about three-fourths of the glans penis was free. I advised him to allow me to circumcise this time, and he again consented; I dissected up the small portion of the prepuce that still adhered to the glans and then circumcised him, cutting off probably half an inch of foreskin, attached the mucous membrane to remaining rim of prepuce and retracted fully, and dressed with iodoform and lint. It again healed very kindly, and when well I found that he had an almost perfectly formed penis, which had developed considerably.

I think that the adherent foreskin was the cause of the nervous condition of the patient, as he is not so excitable now as before the operation; though

two months only have elapsed. If so great an improvement takes place in so short a time, I think I am justified in expecting still greater improvement.

The Hydrochlorate of Cocaine in Genito-Urinary Procedures.

In the *N. Y. Med. Jour.*, Dr. F. N. OTIS tells us that as the result of his own experience and that of others, he thinks that it will be proved that the greatest good will come from the use of the cocaine in the cases of irritability of the deep urethra associated with prostatic disease. In these cases the passage of a catheter, so essential to the comfort and even the life of the patient, is frequently rendered painful, and not rarely impossible, by spasm of the deep urethra. The use of cocaine promises quickly to reduce both the pain and the spasm, and allow of the easy passage of the instrument, and this, too, by a procedure quite within the province of an intelligent patient to use after proper instruction. A four per cent. solution of the hydrochlorate of cocaine in almond-oil makes an excellent lubricant for urethral instruments, and he thinks it may prove even better than the watery solution for applications to the urethra. Its use in this way, in a few cases, has been very satisfactory.—*Ibid.*

DISEASES OF THE EYE AND EAR.

Caution in the Use of Cocaine.

Dr. KNAPP (*Med. Record*) says that he injected six minims of a four per cent. solution into the orbit close to the posterior segment of the eyeball. The anæsthesia was complete, and the operation and recovery were without any disturbance. During the operation the patient's face became pale. The pa-

tient did not, however, complain. Again he injected five minims of a three per cent. solution beneath a sebaceous tumor, the size of a small walnut, in the centre of the upper lid. The anæsthesia was almost complete, and the somewhat laborious operation passed satisfactorily, but during it the patient became as pale as a corpse, felt somewhat faint, asked repeatedly for drink and was covered with cold perspiration. In about fifteen minutes the condition, which was in no way alarming, disappeared. Though much larger doses have been hypodermatically injected before general symptoms were apparent, Dr. K. thinks that five or six minims of a three per cent. solution may be too much for the orbit. The orbital cellular tissue is so vascular that it resembles cavernous tissue. Liquids injected into it may enter the general circulation more readily than from other parts. In further operations he would inject no more than one or two minims and gradually feel his way.

Tinnitus Aurium Treated by the Use of Nitrite of Amyl.

Dr. A. ALT (*Weekly Med. Review*) reports a hundred cases of tinnitus aurium treated by nitrite of amyl. Many of the cases were at the same time treated for otitis catarrhalis chronica. But of the one hundred, thirty-five cases were not at all affected, in ten cases there was a momentary improvement; in twenty-five cases there was temporary improvement; in sixteen cases there was considerable lasting improvement, and fourteen cases were apparently cured. From his experience he is unable to describe the nature of those cases of tinnitus likely to be benefited by the use of the nitrite of amyl. In the discussion which followed the reading of Alt's paper, most observers reported that they had failed

to get any benefit from treating cases of tinnitus by nitrite of amyl. The writer has extensively employed this remedy, but without any good effect, which might be accounted for by the other treatment adopted. Certainly in cases of chronic non-suppurative inflammation of the middle ear, the usual treatment might fairly be credited with the relief to the ringing. In the writer's experience, this has been a frequent result.

Treatment of Auricular Vertigo by Surgical Operation.

WEBER LIEL recommended, and has practised for a long time already, the section of the tensor tympani muscle as an extremely efficient means of treatment for certain attacks of vertigo due to ear disorder. The following case (*Monatsschrift für Ohrenheilkunde*, 1883, No. 11) demonstrates very conclusively the value of this treatment in proper cases. A man 44 years of age, a clerk, suffered from intense degree of vertigo, weakness of hearing, and tinnitus, supposed to be the result of a blow on the head received in a fall while drunk. He could not walk even a few steps without staggering. Examination showed that the only appreciable lesions were in the auditory canal and the tympanic membrane of the right ear. Nothing was present to indicate that a cerebral cause for the vertigo existed. Rarefaction of the air diminished the tinnitus and the vertigo. Weber Liel then performed tenotomy by section of the anterior portion of the tympanic membrane. The success was immediate and striking. The patient was able to execute all the movements of the head rapidly and in all directions, turn in a circle, etc., without experiencing the slightest disagreeable sensation. Moreover, the noises in his ear, which had been so annoying as to

keep him awake all night, became so much softer that they were quite bearable; and later it was found that his hearing had notably improved. The operation was performed was in 1879, and the vertigo has never returned since that time. *Annales de l'Oreille, du Larynx et des Organes connexes.—Med. Times.*

Aural Catarrh.

KINNIER. $\mathcal{R}$. Acid carbolic, gr. iv.; soda bicarb, soda biboras, aa gr. xij.; glycerine, 3 ss.; aquæ ad., f $\frac{3}{4}$ j. M. Ft. lot. ad aurem. Also: $\mathcal{R}$. Zinc oxide, bismuth oxide, aa gr. v.; glycerine, 3 ss.; aquæ ad., f $\frac{3}{4}$ j.

Granulated Lids.

$\mathcal{R}$. Sulphate of hydrastia, grs. ij.; distilled water, $\frac{3}{4}$ j. Make solution.

This is an excellent wash for inflamed and granulated lids.—*Med. World.*

Commencing Hernia.

All pains about the external inguinal opening are not neuralgic, nor inflammatory. I remember well the case of a sensitive young lady whose pains had been very puzzling to her physician, who had reasons for avoiding strict local inquiries. She was indeed sent to me to have these inquiries made, because much and varied treatment by medicines and rest failed to give any relief. The pain was confined to the region of the femoral opening on one side; rest removed it, exertion induced it, coughing made it worse; and a strong impulse was felt in the part by the hand applied when a deep cough was made. Knowledge of the seat and cause of the pain was nearly enough for its cure, and complete relief was got by wearing a truss. Cases of a like kind are not very rare.—*J. Matthews Duncan, in Med. Times and Gazette.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Treatment of Fractured Patella.

In the *Deutsche Medicinal Zeitung*, Dr. VAN DER MEULEN notes that, in the space between the two fragments of a broken patella, a clot of blood is formed. This clot is not organized at once in its entirety, but the anterior and posterior surfaces are first organized, and only after some time does the process involve the central portion. In this way the two fragments come to be united by two thin pseudo-membranes. The author takes advantage of this in his treatment of fractured patella. From ten to twenty days after the injury he proceeds to operate. An incision being made over the patella, the anterior membrane and the unorganized coagulum lying beneath it are removed, but the posterior membrane is not interfered with, and thus the joint is not opened. The fragments are then united by platinum or silver wire suture, care being taken not to include the membrane of organized coagulum, but to let it fold upon itself posteriorly toward the joint cavity. Dr. Van der Meulen has operated in this manner in three cases of fractured patella, and has been enabled to obtain excellent and firm union.—*Weekly Med. Review*.

Treatment of Fractured Patella.

The latest apparatus devised to this end is described by Dr. HOBART BURGE, in the *New York Medical Journal*. The limb rests on a padded straight board, which is divided and hinged opposite to the knee, to provide for slight passive motion, and to which a moveable foot-piece is attached; it also carries, on either side of the knee joint, a pair of

small brass pulleys, round which cords can be passed to weights depending from the foot of the bed. The splints proper are of sole-leather, one about a foot long, five or six inches broad at its upper end, and narrowed towards the knee and made concave at its lower end so as to fit the upper border of the patella; the other splint about three and a half inches square, and cut out at its upper margin so as to fit the lower border of the bone. The splints are soaked for a few minutes in cold water, until quite pliable, padded on one side with cotton-wool neatly covered with unbleached muslin, and then bound on to the limb with roller bandage as nearly as possible in the position which they are intended to occupy. In a few hours they are thoroughly moulded to the limb, and as firm as board. The roller is then removed, and the middle of a small strong cord is sewn firmly just above the concave margin of each splint, and its ends passed through the pulleys and attached to the weights, so as to approximate the concave margins of the splints, and thus to draw together the fragments of the patella which they embrace. The splints are so firm and fit so accurately that no bandages are necessary; they need only to be tied in place by bands passing, not directly around the limb, but under the board on which the limb rests. The weights may vary from one to three pounds. The apparatus is comfortable, inexpensive, and efficient, while it possesses the advantage of leaving the site of injury constantly exposed for the surgeon's observation.—*Med. and Surg. Reporter*.

Traumatic Cephalhydrocele.

Compound fracture of the skull, especially of its base, with resulting escape of the cerebro-spinal fluid, is, as

every one knows, a common accident ; but the occurrence of sub-fascial accumulation of this fluid, in connection with and consequent upon simple fracture of the vault, is of such rarity that two cases recorded by Dr. P. S. CONNER, of Cincinnati, in the July number of the *Amer. Journal of the Med. Sciences*, will be studied with interest. So far as he has been able to ascertain, there have been reported but 19 cases of sub-fascial accumulation of the cerebro-spinal fluid after simple vault fracture, and three others where there had been originally a communicating wound of the scalp, which had closed.

As far as has yet been observed, excluding those cases which were primarily compound, this traumatic cephalhydrocele is met with only in young subjects. Explanation of this fact is probably to be found, at least in part, in the great elasticity of the skull in infancy and early childhood, permitting of marked depression and fissuring of the vault, without that associated wound of the scalp which would be likely to occur were ossification complete ; and in part, also, in the much closer connection of the meninges and skull in children than in youth and adults.

The decided gravity of these cases is apparent from the statistics. Of the 18 cases of simple fracture in which the result is known, 9 (50 per cent.) died—8 of meningo-encephalitis and 1 of erysipelas and meningitis ; and of the 3 in which the fracture was originally compound, 1 died (33 1-3 per cent.) of cerebral abscess. Even the supposed recoveries may be regarded with some suspicion, because of too early report.

Dr. Conner draws the following general conclusions :

1. Simple fracture of the vault of the skull may give rise to a collection,

under the scalp, of the cerebro-spinal fluid ; coming, it may be, only from an opened ventricular cavity.

2. Such traumatic cephalhydrocele may be developed quickly, or only after the lapse of a number of days or even weeks.

3. The condition is one that has thus far been noticed only in young subjects.

4. The accident is quite likely to prove fatal from lepto-meningitis or meningo-encephalitis.

5. Operative interference should be restricted to the removal by aspiration of a limited amount of fluid ; and such aspiration should be made only when severe pressure symptoms have manifested themselves.

6. A similar fluid accumulation may occur after closure of the external wound of a compound vault fracture or of a trephining.

Fracture of the Metacarpal Bones Treated by Extension.

DR. RICHARD B. WETHERILL gives the following as his treatment of fracture of the metacarpal bones in the polyclinic :

Having treated with satisfactory results several cases of metacarpal fracture by the method of extension and counter-extension, I have thought it proper to publish a description of the apparatus employed, believing it to have, in certain selected cases, advantages over the usual treatment by an anterior straight splint with compresses, on the palmer globe. The desired object of maintaining a perfect coaptation of the ends of the fractured bones until union has taken place, is obtained by making moderate extension to the fingers corresponding to the fractured metacarpal bones, by means of adhesive strips ; counter-extension being effected by

fixation of the forearm and wrist to an anterior straight splint, with broad strips of plaster applied in the form of a spiral. In the extremity of the splint one or more small nails, or wooden pegs, are driven; the number and position depending upon the number of metacarpal bones involved. To prevent slipping, the splint is cut away half an inch on either side, and at a point corresponding to the wrist, when the hand is so placed that an interval of several inches intervenes between the fingertips and the extremity of the board. The adhesive strips for the fingers are about ten inches long and half an inch in width, and they are applied to the anterior and posterior surfaces of the finger, extending as far as the metacarpo-phalangeal joint, being confined by a narrower strip of plaster, applied in the form of a spiral. The free ends of the strips are united by their adhesive surfaces, and small holes punched at convenient intervals. The splint having been firmly and evenly padded, the forearm is bound to it in the manner already described. The digital strips are now applied and reduction effected. A return of the displacement is prevented by buttoning the finger-strips to the pegs at the extremity of the splints. Pledgets of cotton are placed over the finger-nails, to prevent dragging and consequent irritation. The extension alone will correct the greater part of the deformity, and any slight tendency to antero-posterior displacement can be remedied by a compress over seat of fracture. A figure-of-8 bandage of the hand, with a spiral reverse to the elbow, completes the dressing. From time to time the extension is tightened, and in the case of a simple uncomplicated fracture this is all that will be required, as the dressing need not be removed until union by

callus has taken place. Should there be much swelling and contusion of the part, the roller bandage can be dispensed with, and the hand left exposed for the application of sorbefacient or antiphlogistic remedies.

Recovery from Strangulated Hernia after Refusal of Operation.

Two or three years ago Dr. J. C. DACOSTA requested me to see a man who had had left-side hernia for about four years, which was now, and had been for many months, irreducible. For two days and a half the patient had had no stool and had been complaining of pain referable to the hernial and to the umbilical region. Dr. DaCosta had attempted taxis, but failing, had given castor oil, which was vomited without inducing an action from the rectum. An enema was ordered and a subcutaneous injection of morphia given; after which he called me to meet him in consultation. When we saw the patient, he complained of no pain. I was not able to get any accurate history of the case from the man himself or his family, but he had a hernia the size of a black walnut, elongated horizontally, lying apparently below Poupart's ligament. I was unable to determine to my satisfaction whether it was a direct inguinal or a femoral hernia. Tonics under ether failed to reduce the hernia, and as herniotomy, though strongly urged by Dr. DaCosta and myself, was refused, opium and belladonna were administered and ice applied to the tumor.

I did not see the patient again, but was informed, two days later, that abdominal tenderness was somewhat more marked, though there was no pain except on pressure. No action of the bowels had occurred. When I saw the attending physician several weeks after, he said the patient had recovered with-

out showing any further unfavorable symptoms. The hernial tumor, of course, remained.

In this instance the unfavorable prognosis made by me was unsustained by the history of the case. Whether strangulation of a small portion of an old hernia was relieved by the manipulative efforts made by Dr. DaCosta before my visit, or by our joint action, or whether actual strangulation never existed, I was unable to determine. The history, indefinite as it was, and the symptoms, justified resort to operation, because of the well known danger of operative delay in strangulated hernia. In all similar cases I should still advocate exploratory incision.

Herniotomy for Strangulated Femoral Hernia in a Paralytic.

A feeble woman, aged about 60 years, and almost helpless from cerebrospinal sclerosis, had had for many years hernia in both groins, and wore a truss. The daughter, who had to feed the patient and wait upon her, on account of her paralytic condition, was able to reduce the hernial protrusions when they appeared. On August 18th, 1882, at 9 A. M., the hernia at the right femoral ring became irreducible after protrusion. The bowels were opened during the day and there was nausea but no vomiting. She seemed, when seen in the evening, to have considerable abdominal pain, but her mental condition and inability to articulate plainly made the obtaining of an accurate history difficult. The tumor, which was the size of a very small apple, was firmly fixed and could not be reduced. After futile efforts at reduction under ether, I made, about eleven hours after strangulation, an incision, and tore through the coverings with forceps and

fingers until I reached the sac. Then I stretched Gimbernat's ligament by forcing my finger tip into the canal, but the hernia was still irreducible, showing that the constriction was probably in the neck of the sac. After sweeping my finger around the neck of the sac and detaching it from the surrounding tissues, I was able to overcome the obstruction to replacement, and easily pushed the gut into the abdominal cavity. The sac was, as is seen, not opened. I believed that I stretched or pulled



apart some pleatings or folds at the neck of the sac, and thus liberated the intestine. After pushing the sac also back into the abdomen, the wound was washed with carbolyzed water and sutures applied. One of the sutures was a very deep one. No ligatures were needed. The wound healed promptly, with but a single drop of pus. The patient's return to her usual condition was delayed, however, by the occurrence of troublesome diarrhœa.

About eighteen months afterward I saw her. There was then a small hernia

at the old site, for which she wore a truss. On the left side I found that the hernial tumor then existing consisted of a large inguinal and a small femoral protrusion. She wore a truss for this tumor, but it did not retain the intestine within the abdomen; but her inability to walk, because of her paralytic state, rendered the wearing of a truss not so essential as in an active person.

I might report other cases of hernia in which I have seen more or less unusual features; for example, a case of herniotomy in a child of six weeks, which I recently saw in consultation with Dr. Steinbach, who operated; or that of a woman with exceedingly large inguinal hernia; but for my purpose of exciting discussion the cases reported will be sufficient.

I desire to emphasize the following points:—

That inguinal and femoral hernia will be found at the same time on the same side much oftener than is supposed.

That it is safer to operate in cases of suspected strangulation than to postpone operation beyond twelve hours.

That herniotomy is attended with little hemorrhage, and if done antiseptically, is accompanied by rapid union and little risk to life.

Extensive Keloid, producing great disfigurement of the Face and Neck.

Clinical service of THOS. G. MORTON, M. D., *Med. Times*.

This colored man, 32 years of age, was engaged in the working of a cotton-press eighteen months ago, when he was so unfortunate as to be severely burned in his hands and face and upper portion of his breast and shoulders by an explosion. The burns healed well, but, as you see, the cicatrices have taken on keloid growth, which has involved in a

mass of new growth the neck, both auricles, and the sides of his face, producing great disfigurement, interfering with movement of the jaw and with hearing. We have applied collodion to the growth, and it has apparently led to some contraction, but probably no more than any dressing would which exercised pressure. We would probably have had just as good results from an ordinary bandage.

I propose this morning to amputate a portion of this tissue, in the hope that a healthy scar may be obtained, such as you see in his hands. I will remove the mass surrounding the right side of the face, as the growth here interferes with



his hearing. I can save part of the pinna of the ear.

[This operation was performed without much bleeding. Two weeks later the wound had nearly closed, and the patient was willing to have the other ear operated upon. This was performed Saturday, December 20. The growth, which covered both ears, the sides of the face, and the neck was successfully excised.]

Dry Cupping in the Treatment of Anthrax.

Dr. E. I. THORN, writes as follows to the *Medical Record*:—

"Upon the appearance of one or more of the small ulcers at the apex of the tumor, apply the cup after inserting a lighted taper moistened in turpentine. In a moment this will open the cells, and there will exude into the cup a tea-spoonful, more or less, of sanious pus. Follow this operation with poultices to keep up the discharge, and in a few days the carbuncle will disappear. In this way we avoid from three to six weeks of suffering, and the constitutional results of the usual protracted illness."

Diagnosis of Cancer of the Stomach.

M. DUJARDIN BEAUMETZ read a paper on this subject before a recent meeting of the Hospital Medical Society of Paris (*Med. Record*). There was indeed no certain pathognomic symptoms of carcinoma of the stomach. In the first place, we are usually unable to determine the exact nature of any internal tumor. Histology has given us a very complete list of the various forms of cancer, but clinically we can make no such fine distinctions.

It has been asserted that the duration of carcinoma is shorter than is that of other chronic affections of the stomach, three years being given as the maximum. But while this might be true of some varieties of cancer, it is not so of all. The author recalled one case of undoubted carcinoma, as proved by autopsy, in which the earliest symptoms preceded death by twelve years. It might be objected that the case was one of cancer following ulcer of the stomach, and that the earlier symptoms were those of the latter affection. Such an assumption was, however, gratuitous, and, besides, the author has seen other cases in which the duration, though shorter than in the instance just cited, yet exceeded greatly that usually set down for carcinoma.

The diagnosis between cancer and dilatation of the stomach was a matter of considerable difficulty. As regards sex, men are more subject to cancer, and so they are to dilatation. Both affections are met with usually at about the age of forty years. Quesnel's assertion, that every cachectic person suffering from a chronic affection of the stomach has carcinoma, cannot be maintained. And even painful œdema of the legs, regarded by Trousseau as characteristic of cancer, may occur with simple dilatation. Pain is not a symptom of any great value, for although it usually exists it may also be absent. The vomiting of coffee-ground matters, formerly regarded as pathognomic of cancer, may occur in dilatation, and is, therefore, a sign of no exceeding value. Even the existence of a tumor may be misleading, for a thickening of the stomach walls may occur in dilatation and may be mistaken for cancer. If, however, the tumor be well defined and lobulated, the diagnosis of cancer is rendered fairly certain. The German method of setting free a large quantity of gas in the stomach, the author considered to be practically of no value in diagnosis. It has been asserted that in the case of cancer the hydrochloric acid is wanting in the gastric juice, but this is equally inapplicable and valueless in practice.

M. Romelaire, of Brussels, had noted a fact which M. Dujardin-Beaumetz thought might prove useful in this connection. He had found that in cancerous affections of the stomach and liver the amount of urea excreted was reduced to an average of 120 grains, and never exceeded 150 grains in the twenty-four hours. In the case of ulcer in the stomach, on the other hand, the amount of urea ranged from 250 to 500 grains, and never fell below 225 grains per

diem. The author had verified these conclusions in a general way, yet they were not entirely reliable as a means of diagnosis. He had had a patient in whom the daily amount of urea excreted was but 45 grains, and had, therefore, concluded that the disease was cancer, but found at the autopsy that the tumor was a hydatid cyst. There was still another procedure which might be of assistance in establishing a diagnosis. He had procured an amelioration, and even a temporary lull in the symptoms, by regular and methodical washing-out of the stomach in the case of carcinoma. In the case of dilatation, however, no improvement was obtained by this practice.

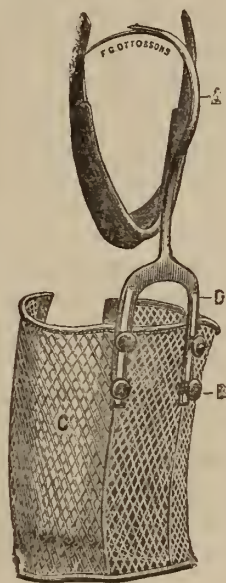
Iodoform in Abscesses.

After evacuating the pus of a scrofulous abscess, Prof. GROSS states, with confidence, that the best results are obtained from the use of iodoform in glycerine. The amount to be thrown into the sac depends upon the quantity of pus. For every ounce of pus there is required 4 1-4 grains of iodoform and 48 grains of glycerine.—*Med. Med. Journal.*

Dangers from Plaster of Paris Jackets.

Dr. SAMUEL W. SMITH reports in the *N. Y. Medical Record*, October 18, 1884, two cases in which severe bronchitis was, in his opinion, induced by the chilling produced upon the thorax of children by the application of a plaster of Paris jacket. One of these cases, a little girl, aged seven, terminated fatally, having involved the pulmonary capillaries. The other patient recovered. Dr. Smith states that a number of other children to whom he had applied plaster of Paris jackets gave him trouble in the same way, and that in consequence he

has abandoned the use of the plaster of Paris, and now makes a corset of light tinned wire interwoven over an untempered steel frame which is shaped upon a plaster cast of the deformed patient.



So far as the special danger to which he refers is concerned, we fail to see how the patient is saved from it by this method, inasmuch as the taking of a plaster cast is necessary, in order to fit the wire upon it. Still, these splits will in many cases serve an excellent purpose and have the decided merit that they can be

removed at night and reapplied in the morning.

He says that Prof. F. H. Hamilton's wire gauze hip splint suggested to him the use of the same material for a corset. It is easily arranged for the application of a jury mast when necessary by means of screw loops on the steel rods which support the back. The legs of the jury mast having slits in them, are readily made fast by screws.

The Treatment of Cold Abscesses with Injections of Iodoform.

VERMEUIL (*Revue de Thér. Med. Chir.*) treats cold abscesses as follows: Having removed the pus by means of a Potain's aspirator, he injects into the cavity, with the same instrument, from fifteen to twenty grammes of iodoform dissolved in glycerin. If this amount is not exceeded, he states, there is no danger of poisoning. The solution fills

all the depressions in the abscess cavity, and deposits a uniform layer of iodoform on the pyogenic membrane. This method of treatment is said to be perfectly safe, since there is no fear either of introducing septic germs or of setting up fresh inflammation, such as frequently follows the injection of tincture of iodine. The simplicity of the method renders it easy of application by one of no pretensions to surgical skill.—*N. Y. Med. Jour.*

Blistering and Lead Nitrate Ointment for Ulcers.

Professor BARTHOLOW says that many old ulcers of the leg, which have resisted other treatment, can be cured by first blistering the surface of the ulcer and the adjoining integument, then putting on a light poultice, and afterwards applying an ointment composed of: $\mathcal{R}$. Plumbi nitratis, $\mathfrak{z}$ j.; vaseline, $\mathfrak{z}$ j.—*Med. Herald.*

Some Recent Advances in Methods of Wound Treatment.

The following is a portion of an article by Dr. L. S. PILCHER, in *N. Y. Med. Jour.*:

2. *Buried or Layer Sutures.*—By this term is meant the application of a separate series of sutures to the deeper layers of tissue that may have been involved in a wound. By the use of as many successive layers of such sutures as may be required, all the parts of a wound, however deep, may be brought into absolute and secure apposition, and thus rapid and immediate healing be favored, from the bottom to the surface, as readily as if it had been only a slight superficial wound. As the wound is closed by the successive apposition of one layer of tissue after another, each series of sutures becomes buried, and receives no further attention, being left

to the due activity of the tissues for removal by absorption. This buried or layer suture requires for its safe use a reliable article of catgut—one that the surgeon may be sure never to hear from again by reason of any irritation produced by it after it has been covered up from sight. Such a catgut can be very readily and quickly prepared from any ordinarily fair specimen of gut by immersing it in a watery solution of corrosive sublimate (1-1,000) for forty-eight hours, and afterward keeping it in an alcoholic solution of the sublimate of like strength until it is required for use.

This method of using sutures is a natural development from their use as ligatures, in which case it has become the habit to cut the threads off short and abandon (that is, bury) them in the tissues when the external wound is closed. The earlier employment of the buried suture was in attempts at the radical cure of hernia, and in certain plastic operations, as the repair of extensive perineal lacerations. It has lately been extended to securing deep apposition of the flaps made in major amputations, and is susceptible of being applied to many deep fresh wounds. It is a most valuable device for preventing the occurrence of deep cavities in which wound secretions might accumulate. Still, for its safe and successful use, without the accessory aid of drainage-tubes, considerable experience and judgment are required; indeed, for the general practitioner, I should say that the free use of drainage-tubes ought not to be dispensed with, even though the buried sutures were employed.

3. *Absorbent Dressings.*—In the practical application of antiseptic methods there is no point which is of greater importance than to secure, as an external covering to the wound, some material that shall readily and perfectly soak up

whatever discharges may appear upon the surface. The proper apposition of the wound-surfaces having been accomplished, and adequate provision for the escape of the secretions having been made, the next thing is to provide absorbent materials for the external dressings, which themselves must be purified from any matter that might contaminate the wound. The use of carbolated gauze for this purpose is familiar to all as a part of the dressing introduced by Lister. But the eightfold dressing of Lister is quickly soaked through, so that it must be covered with a layer of Macintosh to compel the diffusion of the secretions horizontally over its area, as well as to prevent the escape of the carbolic acid. Saturated as it already is with a solution of resin, it is only the interstices between its fibres that hold the secretions by the power of capillary attraction. It is difficult to prepare; it is expensive; it needs frequent changing, and it so rapidly loses its carbolic acid that it must have been quite recently made to be reliable. For these reasons substitutes for it are greatly needed—indeed, are imperative—if the best results in the treatment of wounds are to be made attainable by general practitioners. With the lapse of time, as the result of much experimenting, it has become apparent that the one great essential in a wound-dressing is its absorbing power. The first important contribution in this direction was the accidental discovery of the value of peat-mold as a wound-dressing, by Esmarch, in his clinic at Kiel—a discovery which has been followed up with energy by this surgeon and his assistants to the full development of their system of permanent dressings, in which absorbent materials, not necessarily peat-mold, form an essential part. Of the materials which have been used with advantage

as absorbent dressings, there are two which, by reason of the energy of their action as absorbents, their cheapness and general availability, and the simplicity of their use, I desire to especially dwell upon in this connection; these are turf-moss and sawdust.

Turf-Moss.—This is the ordinary turf or marsh-moss, growing in all temperate climates in damp and low places, and especially familiar to us from its use by florists as a bed in which to thrust the stems of flowers and plants, and by nurserymen as a packing about the roots of shrubs and saplings that are to be transported some distance. It answers these purposes by reason of its power of sucking up and retaining moisture. The sphagraceæ, or turf-mosses, of which there are a number of varieties, have their stems and leaves of a cellular and reticulated structure; a comparatively small proportion of the cells and spaces entering into their structure are filled with chlorophyll, the greater part of them being empty in the dry state, but rapidly sucking up and swelling out with fluid when brought in contact with moisture, the rapidity of this filling with fluid being facilitated by the existence of numerous perforations, communicating with the external air that exists in the walls of the cells. This absorbing power eminently fits it for use as a wound-dressing. For this purpose, having been gathered and sorted over to free it from perceptible impurities, it is dried, and is then ready for use. It may be used either in the natural state or after having been first impregnated with some antiseptic, as corrosive sublimate or naphthalin. Unless this latter is done, the moss is likely to develop an unpleasant smell after it has been kept applied to a wound for a week or so. To Lesrink, of Hamburg, is due the credit of having introduced

the use of this material, which he did in a communication to the *Berliner Klinische Wochenschrift*, in the fall of 1882. In the spring of 1883 it was made the subject of a communication to the German Surgical Congress by Hagedorn, of Magdeburg, and at the present time it is almost exclusively used as a wound-dressing in some of the largest clinics of Germany. It is used, made up into pads or cushions of various sizes, by inclosing the dried and prepared moss in bags of coarse gauze, smaller and softer pads, made out of the partly pulverized particles, being used to place directly upon the line of the wound, while larger cushions are applied over these so as to cover an area some distance in every direction from the wound, and in the case of the limbs, quite encircling them. It answers admirably for purposes of protection and compression by means of its softness and elasticity, as well as for the main object of absorption. I consider it a most valuable addition to the list of wound-dressings, and one which deserves to become popularized in the United States.

Sawdust.—In this cheap and despised material we have likewise a very superior substance for making absorbent wound-dressings. Compared with the other wood preparations that have been introduced—*i. e.*, wood-wool and wood-flour—I think it is to be preferred, for it is practically as absorbent, and is much cheaper and more readily obtained. The fact that as an absorbent it answers all practical purposes, while it can always be obtained, and with little or no expense, leads me to think that it is destined to become the most universally used of all dressing materials in general practice. There was a hope that in absorbent cotton a most desirable and generally available agent for wound-dressings had been found, par-

ticularly as it was easily impregnated with various antiseptic substances, but although unequaled as a protective and compressing agent, it has failed as an absorbent material. My observation is that only a limited layer of the cotton, immediately adjacent to the wound, absorbs, and that this quickly forms a crust which retains the discharges beneath it, or prevents their further escape from the wound. In this I have been repeatedly disappointed in its use, and balked in my efforts at the drainage of wounds. For this reason I would reject it altogether as an immediate dressing, and reserve it only for external protective purposes. But even here it can be supplanted by quilted cushions of sawdust at a tithe of the cost. The dust obtained from soft and absorbent wood, as white pine, poplar or basswood, is desirable, if it can be obtained. It should be quite fine, and, if necessary, should be passed through a sieve, to separate the coarser particles. It absorbs more readily and evenly if it is a little moist when applied, and for ordinary purposes it may be moistened to advantage with a dilute solution of corrosive sublimate, 1 to 1,000 at the time of using. The corrosive sublimate, of course, soon decomposes when thus mixed with the sawdust, and can not be depended on for maintaining a prolonged aseptic condition of the dressing. For this reason a sawdust dressing, if long retained, after becoming in some degree filled with wound-secretions, will become sour and smell unpleasantly. This may be obviated by mixing in with the sawdust, already dampened with the corrosive sublimate, a small amount of naphthalin, and a dressing so prepared may be retained for a prolonged period without becoming a source of danger or offense.

The sawdust is to be made up into

pads or cushions, with purified and absorbent gauze. This prepared gauze is simply the ordinary cheese-cloth of the shops, which has been boiled in a dilute solution of caustic soda or of potash for several hours, then repeatedly rinsed, and finally dried. This should finally be immersed for a few minutes in the corrosive-sublimate solution before it is used. With these mean pads and cushions of any size may be made, from two inches to half a yard square, having a general thickness of about one inch, the sawdust being prevented from shifting by occasional through-and-through stitching or quilting with thread.

Dressing for Joints.

As a fixed dressing for joints, etc., requiring rest, Dr. LEVIS uses the following, which is painted over roller bandages or cloth, applied to the part : Glue, lb. j. ; oxide of zinc, lb. ss. ; water, Cong. ss.—*Coll. and Clin. Record*.

Sorbefacient Mixture.

Prof. GROSS considers the following as one of the most efficacious of sorbefacient mixtures : $\mathcal{R}$. Hydrargyri chloridi corrosiv., gr. 1-12 ; antimonii et potassi tartrat., gr. 1-15 ; potassii iodadi, gr. x. M.—*Ibid*.

A Dispensary Dressing for Ulcers of the Leg.

The following is a short abstract of an article by Dr. B. FARQUHAR CURTIS in *N. Y. Med. Jour.*:

At the Out-patient Department of the Chambers Street Hospital we have lately found a very convenient dressing for ulcers of the leg in Lister's boric-acid dressing applied with a crinoline bandage. Its advantages are : (1) firm and lasting support, even enabling patients to work ; (2) asepsis, and non-disturbance of the

part ; (3) economy of time to both surgeon and patient ; (4) economy of material, one dressing costing but little more than any ordinary dressing and bandage, and lasting three times as long.

The mode of application is as follows : The leg and foot are thoroughly washed with a 1-to-40 carbolic-acid (or 1-to 1,000 corrosive-sublimate) solution, and the ulcer itself is washed with a saturated solution of boric acid. Over the ulcer is put a piece of thin gutta-percha tissue (as a substitute for the Lister macintosh), large enough to extend about one fourth of an inch beyond its edge on all sides, which has been soaking for some minutes in the boric-acid solution. The leg is wiped dry, sufficient borated or salicylated cotton to take up the discharge is laid over the ulcer, and the rest of the leg from the ankle to the knee is wrapped in a half-inch layer of cotton batting. An ordinary bandage is applied to the foot.

The crinoline bandage (three inches wide, ten to twelve yards long) has meanwhile been soaking for five minutes in water, and it is now squeezed quite dry and snugly applied over the cotton from the ankle to the knee, making a thickness of three or four layers. Care must be taken to have the cotton project beyond both its upper and lower edges, as they may excoriate the skin when dry and stiff. In half an hour the crinoline will be dry ; but, if time is important, an ordinary bandage may be applied outside of the crinoline, and the patient dismissed at once.

We direct our patients to return in a week ; but to come at once if they should have any pain, or if the discharge from the ulcer should come through the dressing. But the dressing can be worn for much longer than a week.

For Phagedenic Ulcers and Old Sores.

R̄. Pulv. ulmus. cort., $\frac{3}{4}$ j.; fld. ext. hamamelis, 3 iij.; fld. ext. aloes soc., 3 j.; cosmoline, $\frac{3}{4}$ ij. Mix. Spread thinly and apply twice a day, washing off each time with tepid water and castile soap.—*Keystone Med. Jour.*

VENEREAL DISEASES.

Complications Arising from Undescended Testicles.

Dr. JAMES L. LITTLE (*Anal. of Anat. and Surgery*):

There are three positions in which a testicle may be detained in its transition from the abdominal cavity to the scrotum:

- (1) In the abdominal cavity near the internal ring.
- (2) In the groin near the external ring.
- (3) In the inguinal canal.

A number of such cases have come under my observation. The most common situation has been where the testicle was retained just outside the canal near the external ring.

The following is the history of a case sent to me by Dr. WM. A. HAMMOND, in which the testicle was retained in the inguinal canal. The patient was twenty-six years of age, and had the following history:

He had never noticed anything like a testicle on the right side until three years before he came under observation, when, while exercising on a trapeze, he received a blow on the right side of the abdomen, which gave rise to severe pain, similar to that produced by pressure upon the testicle of the other side. About a month afterward he noticed a small and soft tumor on the right side

just above the external ring. From that time after any violent exercise, straining, or long walking, the tumor would increase in size and become very painful. After a few days the swelling would subside, but the tumor would never become as small after an attack as it was before. Last winter the patient wore a truss for some time without any benefit. The tumor gradually increased in size. On examination only the left side of the scrotum was found to be developed, which contained a testicle of normal size. In the right inguinal region was a swelling extending up in the direction of, but some distance

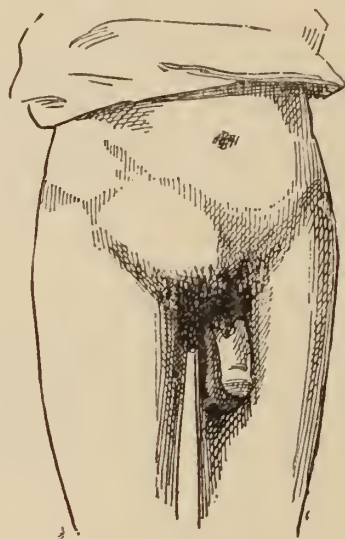


FIG. 1.—The external appearance in case of a testicle retained in the inguinal canal.

above, the inguinal canal (see Fig. 1). A moderately firm and perfectly movable tumor could be felt. This could be moved so as to lie almost at right angles to its normal situation. Firm pressure upon the upper part of the tumor gave rise to a sensation similar to pressure upon a testicle. The tumor was about four inches long by two broad. The external abdominal ring

could be distinctly felt, but was so small that the little finger in invaginating the tissue could not be passed into it.

On November 24th, the following operation was performed: The coverings of the tumor were rendered as tense as possible by grasping it with my left hand, and an incision of about five inches in length was made over the most prominent part, nearly parallel to Poupart's ligament. The tissues were divided until the peritoneum was reached. This was opened upon a director, and the tumor was then forced out from its bed. Its attachments were composed of folds of peritoneum extending along its entire inferior surface. A large number of tortuous vessels were seen within this peritoneal pedicle, more abundant at the upper extremity than at the other portions. A double catgut ligature was passed through the centre of the pedicle and tied on both sides. Another ligature was applied, embracing both halves of the pedicle, and the tumor was then removed. No exploration of the wound, with a view to ascertaining whether it communicated with the abdominal cavity, was made. The deep parts of the wound were brought together with three Lister's leaden plate sutures, and the superficial wound was united by the ordinary silk suture. The wound united by primary union, without any untoward symptom.

On examination by the Pathologist of the Hospital, Dr. Satterthwaite, this tumor proved to be a round cell sarcoma. In shape it was a flattened ovoid, while its dimensions were four inches in length by two broad, and one and a half thick. On section its cut surface was of a pinkish color, simulating brain substance both in consistency and feel. It was enclosed in a coat of peritoneum, which formed its capsule, while in the

folds that were given off posteriorly were portions of the vas deferens and spermatic vessels. At its anterior and external portion there was a trace of the normal tissue of the testis.

In conclusion, it seems to me that in all cases where a testicle is situated, either in the canal or just outside the external ring and becomes a source of annoyance to the patient, it would be judicious to advise its early removal.

Permanganate of Potassium in Gonorrhœa, Leucorrhœa, and Suppurating Buboës.

Prof. ROBERTS BARTHOLOW thus writes in the *Medical News* :

In gonorrhœa, leucorrhœa, and suppurating buboës, a strong solution—five to ten grains to the ounce—is an efficient remedy. It has proved to be especially so in gonorrhœa. When the attack is recent, the solution should not be stronger than two grains to the ounce, but the more chronic, the stronger the injection may be made, of course within reasonable limits. In suppurating buboës, the contents of the sac should be drawn off with an aspirator if still intact, or thoroughly evacuated if ruptured, and the cavity filled with the stronger solution mentioned above.

Lacerda's experience with permanganate in snake poison renders it almost certain that in the corresponding poison of syphilis the local application of this remedy at the earliest moment to an infecting chancre may be productive of the best results. In all forms of unhealthy and sloughing syphilitic sores—in sloughing phagedæna, for example—it deserves more extended use than has heretofore been made. Finely pulverized, it can be dusted thoroughly over the diseased surface and introduced into all the sinuosities. By the same mode of application it can be used in

lupus and epithelioma, and will, doubtless, be found more effective than the chlorate of potassium, which, applied in this way, has lately been much urged on the attention of the profession.—*Med. and Surg. Reporter.*

Treatment of Gonorrhœa.

Dr. J. W. LILLY, of Pomeroy, Ohio, having been repeatedly disappointed, as we all are, in the treatment of gonorrhœa, cast about him for some reliable remedy, and as a result he publishes the following formula in the *Cincinnati Lancet and Clinic*. He claims that it will give entire satisfaction, if used as directed: $\mathcal{R}$ Hydrastin, gr. ss.; Boracic acid, gr. iss.; Morph. acetate, gr. $\frac{1}{2}$; Chlor. sodium, gr. j. Pure cocoa butter q. s. to make bougie three inches long.

The method of using it is, first have patient urinate, then cleanse the urethra with *starch water*, after which introduce bougie. Continue this morning and evening until the discharge ceases (which it does in from two to five days), and then one each evening for five evenings more.—*Ibid.*

Chancroid.

As a stimulating application to a chancroid, Prof. Gross recommends:— $\mathcal{R}$ Acid, tannici, gr. ij.; Ung. hydrarg. nit., 3 j.; Adipis benzoat., ad $\frac{3}{4}$ j., M. Sig. Apply on a piece of lint.

Cocaine in Chordee.

I have had two cases recently of chordee, accompanying gonorrhœa, which has yielded easily to the soothing influence of an injection of the hydrochlorate of cocaine. The first case I had exhausted almost everything in my efforts to relieve. It was one of those obstinate cases with which we

meet sometimes, and which seem to defy all treatment. I gave this man an injection of 10 drops of a four per cent. solution mixed with 30 drops of water. After this injection was introduced, I worked it along the urethral canal until the mucous surfaces were bathed in the solution. I then allowed it to remain several minutes. From this time out I had no further trouble with either the chordee or the patient. The second case yielded a like result.—*New England Medical Monthly.*

Tubercle Inoculation During Coition.

December 26, 1884, M. Fernet read a paper before the Medical Society of the Hospitals on the transmission of tuberculosis by sexual congress. The author sided with those physicians who think that the microbe of Koch makes its entrance not only by the respiratory tracts, but also by the skin and the digestive and genito-urinary mucous membranes. He recalled the fact that Cohnheim and M. Verneuil had endeavored to prove that urethral tuberculosis in the man can result from sexual intercourse with a woman who is the subject of uterine tuberculosis; this clinical fact is easily explained, since the bacilli have been detected (notably by M. Babès) in the urine and the vaginal muco-pus of a woman having tuberculous lesions of the genital organs.

From facts collected and observed, M. Fernet arrives at the following conclusions: (1.) Genital tuberculosis can be the result of direct contagion during coitus. (2.) That blennorrhœas ought to be held as suspicious which do not succeed true blennorrhœa, and their tuberculosis nature should be made plain or negated by a careful search for the bacillus. (3.) Coitus between

spouses, one of whom is affected with tuberculosis, should be considered dangerous. (4.) Genital tuberculosis can be the source of a secondary general infection, and so should be treated as energetically as possible by the aid of various medico-chirurgical means.—*Louisville Medical News.*

DISEASES OF THE EYE AND EAR.

A Point in the Treatment of Purulent Ophthalmia.

Dr. EDGAR A. BROWNE (*Brit. Med. Jour.*) considers that the two most important considerations in the treatment of this disease are to wash away the infective material as thoroughly and as early as possible, and to render the conjunctival epithelium and secretions as nearly as may be aseptic. For the first indication he has devised an instrument that enables him to throw a stream of pure or medicated water into the upper sulcus for any length of time he pleases.

The instrument resembles an ordinary lid-elevator, but it is rather deeper in the claw, and constructed of hollow-plated tubing, instead of wire. It is furnished above with a handle, and behind a small curved nozzle is connected by means of an India-rubber pipe, six or seven feet long, with a reservoir capable of containing about a quart of solution. The limb that passes beneath the upper eyelid is pierced with six fine holes, through which the fluid issues as a douche. A stop-cock or spring-clip is provided to regulate the flow.

In use, the reservoir is filled and hung up. The surgeon or attendant stands behind the patient, who holds his head slightly inclined over a basin. The elevator is gently insinuated under the upper lid, and the stream turned on.

The points requiring attention are these :

1. It is necessary to ascertain that the orifices are patent ; they are liable to become clogged ; four in full play is sufficient.

2. The reservoir must be well elevated to give a good fall, and it must be nearly full to give a good pressure.

Dr. B. had very good results from a solution of trichlorphenol. He finds a two per cent. solution amply strong for the first applications in gonorrhœal ophthalmia, and one per cent. for ordinary use. It gives rise to a good deal of smarting, which ceases directly the flow is stopped. Some skins are easily irritated by its flow over the cheek ; the majority are not affected. The skin may be protected by vaseline if necessary. He uses it twice a day for about a quarter of an hour. In one severe case he used it three times a day. As the case progresses, a one per cent. solution is sufficient ; in some, a half per cent.—*Med. & Surg. Reporter.*

Ulcers of the Cornea.

Scrofulous ulcers of the cornea, and those occurring in smallpox are promptly healed by the application, twice daily, of a few drops of the following solution : Sulphate of eserine, gr. ii., aq. dist. zi. Eserine is an alkaloid obtained from the calabar bean, and is also called physostigmine.

This solution is also useful in acute glaucoma, presbyopia, and neuralgia oculi.—*Med. Herald.*

DISEASES OF THE SKIN

Jaborandi for Inflammatory Affections of the Skin.

Case 1.—A well-marked case of erysipelas of the face, starting from the

nose. I saw the man late in the afternoon. Gave pill hydrg., gr. x., at bedtime; followed in the morning by saline, and gave: *R.* Fl. ext. jaborandi, $\bar{z}$ j.; tr. opii; glycerin, aa $\bar{z}$ ss. M. Sig.—Paint over the part with chicken feather every two hours.

Continued treatment for three days, when I considered patient cured.

Case 2.—A lady, with irritable spine, was in the habit, at certain times, of applying a counter-irritant of croton oil; but this time she used too much, and by some means the effect was diffused over the whole surface of the body. When I was called, three days later, the whole surface of the body was extremely red, painful and œdematous. All the usual domestic remedies had been tried without effect, at least without benefit. I ordered the mixture, as in case one, to be used. The pain was relieved almost instantly, the redness and swelling gradually subsided, and on the third day there was nothing left of the inflammation, but an abundant exfoliation of the cuticle was going on, which finally left the skin in excellent condition.

It may be proper to add, that in this case I ordered the woolen underwear to be exchanged for cotton, and gave a slight purge with Epsom salts.

Case 3.—My wife severely scalded her hand with boiling liquid. It was remarkably painful, and the burned surface covered most of the hand. When I saw her, about half an hour after, I saturated a compress with equal parts of fl. ext. jaborandi and laudanum, and applied to the burned surface. This totally prevented the inflammatory action, which I am sure would have followed from the severity and extent of the scalded surface.

From my experience with this limited number of cases I am sure that we have

in this drug a valuable addition to our therapeutics of acute inflammatory affections of the skin. In proper combination it acts quickly and efficiently.—*Dr. W. W. Claybaugh in Med. and Surg. Reporter.*

Bromide of Arsenic for Pimples.

It will be a great relief to suffering thousands to learn, on as good authority as Dr. Piffard, that the bromide of arsenic is a cure for pimples. He recommends a one per-cent. solution, of which one or two minims are to be taken in a wine-glassful of water three times a day, on an empty stomach. The dose is to be diminished as the pimples begin to disappear.—*Med. Age.*

Pedicule Capitis.

It is stated that a solution of corrosive sublimate in dilute acetic acid (grs. ij– $\bar{z}$ j) destroys pediculi and their ova.—*Coll. and Clin. Record.*

Rosinol.

GAUTRELET (*Gaz. hebdomadaire de méd. et de chir.*) describes this substance as a yellowish, oily fluid, of a peculiar odor, having the composition $H_{16}C_{35}$. It contains a number of bodies, such as terebene, colophene, cresylic and phenic acids, and creasote; hence its combined tonic, antiseptic, and astringent powers. The writer recommends rosinol as an external application, especially in surgical dressings. He says that it has a specific action in elytritis and endometritis, and remarks that it is very useful in obstetrics. Internally, it is a valuable agent in the treatment of typhoid fever, cancer and ulcer of the stomach, and, in fact, in all lesions of the gastro-intestinal mucous membrane. By reason of its marked astringent action it is particularly indicated in catarrhal affections of the respiratory tract.—*N. Y. Med. Journal.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Fork for Fracture of the Patella.

Dr. L. A. STIMSON showed before the N. Y. Surgical Society, a fork to be used in the treatment of fracture of the patella. He had expected to show a patient upon whom he had used it with success, but the man had failed to come.

In using Malgaigne's hooks he had found it difficult to insert the hooks deeply enough to adjust the screw that connects them, and he had devised this fork as a substitute. This fork is of iron, two-pronged, the prongs bent in the flat at an angle of forty-five degrees at their junction with the shaft. The prongs are one inch long and three-quarters of an inch apart; the shaft is about three inches long. There is a small ring at the base of the prongs for the attachment of an india rubber cord, another at the end of the shaft for the attachment of a bandage encircling the thigh.

The instrument is used by inserting the prongs through the skin above the patella and pressing them down until they rest against the upper border of the upper fragment. The shaft lies along the median line of the front of the thigh, and is prevented from tilting or moving to either side by a roller bandage wrapped around it and the thigh. Traction downward is made by a piece of india rubber tubing, one end of which is attached to the ring at the base of the prongs and the other made fast to the front of the skin by adhesive plaster. The introduction of the prongs can be made easily and painlessly by chilling the skin with ice and making two punctures with a knife.

In the case he had treated with this

fork the fracture was transverse and the separation about an inch. The separation was readily overcome by the traction. The patient made no complaint during the five weeks the instrument was in place. The patient was kept in bed, with the limb suspended in a wire



gutter, and the punctures kept dusted with iodoform; there was no inflammatory reaction about them, and only a slight discharge. The lower fragment was kept gently pressed upward by an oblique turn of a roller bandage. On the removal of the fork, five weeks after the occurrence of the fracture, the fragments were closely and firmly united, without independent mobility. As a precaution, a plaster bandage was then applied, and not removed until the end of the ninth week. The knee could then be flexed nearly to a right angle, and there was still neither independent mobility nor separation of the fragments.

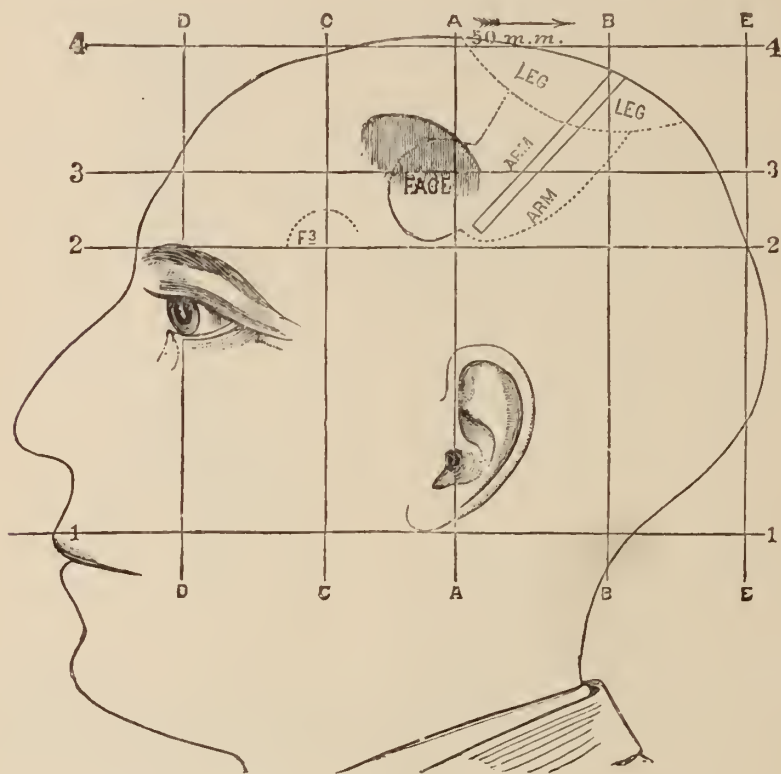
—*Canada Lancet.*

A Case of Traumatic Aphasia.

Dr. B. BRIBACH reports the following case in the *Archives of Medicine*.

Wilhelmina Muller, a healthy, stout country girl, eight years of age, had her skull fractured on the morning of June 28, by the kick of a mule. She had

about my office. The fracture was situated in the left temporal region, rather more than two inches long, one-sixth of its extent involving the frontal, the rest the parietal bone. It had the shape of a curve, convex above, as represented in the diagram; the bone below and all



I. LINES OF CRANIO-CEREBRAL TOPOGRAPHY PROJECTED ON A PROFILE OF THE HEAD.—1-1. Alveoli-condyloid plane (horizontal); 2-2, Fronto-lamboid line; 4-4. Vertex horizontal. A-A. Auriculo-bregmatic line passing through meatus auditorius, and drawn at right angles to line 1-1; at the top of the skull this line indicates the true bregma. B-B. Vertical drawn parallel to A-A, 50 mm. (2 inches) posterior to it; at its point of impact on the top of the skull this line crosses the posterior end of the fissure of Rolando, the so-called *Rolandic point*. The straight double line extending obliquely from the *Rolandic point* overlies the course of the fissure of Rolando, and is known as the *Rolandic line*. The areas marked off by dotted lines overlie the centres for the leg, arm, face, and for speech (motor function). THE HEAVY CONCAVE LINE WITH SHADING IMPINGING ON THE FACE CENTRE INDICATES THE SITE AND RELATIVE EXTENT OF THE CRANIAL FRACTURE AND DEPRESSION.

walked some distance after recovering from a stupor of a few minutes' duration, and I saw her about an hour after the accident happened. She was in a badly frightened and excited condition, but entirely conscious, and walked freely

along the line was markedly depressed. There was considerable difficulty in disengaging the flap of the cut scalp from between the fractured edges, into which it was firmly wedged, and I did so after giving chloroform. As there

were no symptoms of either concussion or compression of the brain evident, I closed the wound by sutures.

After the child had recovered from the effects of the anæsthetic, it was found that she lacked the faculty of speech. I ascertained that she had not spoken anything since receiving the injury. A close examination showed absence of paralysis of the muscles of the face, tongue, palate, and limbs. The facial expression was intelligent, and the girl showed evident anxiety to speak, finally making known by signs that she wanted water. Continued efforts to make her speak proved useless, and I directed her father to take her home and keep her quiet, and to induce her to communicate her wants by means of a slate and pencil.

On June 29, twenty-four hours after the accident had occurred, I found the child doing well, except the existence of aphasia. Pulse 90, full and moderately strong; temperature normal; appetite and secretions good. She had uttered only one word, "coffee," which she made use of to indicate any of her wants. She had not made use of the slate, but whether from co-existing agraphia, or from lack of training to express her thoughts by means of writing, I was unable to ascertain. No symptoms of paralysis were discoverable anywhere. Patient efforts to make her speak were without result, and I inferred that I had to deal with a case of aphasia produced by pressure on the speech centre. The parents consented to the operation of trephining, which I deemed necessary to relieve the condition and to meet complications by subsequent inflammation. Dr. A. Montgomery, of St. Louis county, who kindly assisted me, concurred in my view of the case, and of the necessity of relieving the compression of the brain.

I trephined the same afternoon, thirty hours after the child was injured, and elevated the entire depressed portion of the skull. The dura mater was not injured, and the inner table of the skull was free from spicula.

June 30. Patient had passed a quiet night, and taken a hearty breakfast. Pulse and temperature normal. The mother informed me that the girl had slept over eight hours after the operation, and on awaking asked for a drink. In the morning she had again correctly named and asked for some playthings. During my presence the child could not be induced to speak.

July 1. I learned that patient had repeatedly spoken, but seemed to have been confused, she would often call things by wrong names. On removing the dressing, she complained that I hurt her; on this occasion I heard her speak for the first time.

The patient lived four miles from my place; I could see her but once a day, and had no opportunity to closely watch the manner in which the faculty of speech returned. For four or five days there was a certain amount of loss of verbal memory; the speech was rather slow, the articulation perfect, but substitution of wrong names occurred frequently. At the end of ten days, about July 8, she spoke about as well as before.

Surgically, the case progressed very favorably. There was no fever at any time; I allowed the girl to get up at the end of the second week, the scalp wound being then nearly closed. In the first and second weeks in August, two small splinters of bone were discharged from the wound over the seat of the trephined opening, and I subsequently removed one more, after which the wound closed entirely. It is now covered by a thick cicatrix. The girl has attended school

since the beginning of September, and is now as well as ever.

Comparing the seat of the injury with an adult skull, I concluded that the pressure of the fracture had been bearing on the third and ascending frontal and the ascending parietal convolution of the left hemisphere. Subsequent reference to Dr. Seguin's diagrams of cranio-cerebral topography, and exact measurements of the patient's head, showed that in this I was mistaken. The measurements of the child's head are eleven and a half inches from root of nose to occipital protuberance, twelve inches from right to left external meatus auditorius. A line drawn from the true bregma to a point midway between the external angle of the left orbit and the left meatus auditorius crosses the centre of the fracture three and one-quarter inches distant from the bregma. Projections on Dr. Seguin's diagrams place the depressed area on the lower part of the ascending frontal, and but slightly on the posterior part of the third frontal convolution, involving the face centre according to Dr. Seguin, the centre of articulation according to Ferrier. Assuming the relative locations of skull and brain to be identical with the patient and Dr. Seguin's diagrams, I can explain the involvement of the speech centre in this case only by assuming that the inferior depressed portion of the fracture exercised some indirect pressure on the speech centre, which is located anterior to the fracture.

—*Med. & Surg. Reporter.*

Remarks on Two Cases of Dislocation of the Tarsus.

Dr. THOS. G. MORTON (*Phila. Med. Times*). *Gentlemen*: The case shown at the last clinic of compound dislocation of the tarsus, which I told you was such an unusual accident, has since died. I

remarked then that I thought the case was very rare; that I had not been able to find a similar one in the previous records of this hospital, nor had I seen any in my service, extending over twenty-one years. By a strange coincidence a second case of the injury, almost identical with the first, except that it involved the left instead of the right foot, has been brought into the hospital, and is now before us.

The first was caused by catching the foot in an elevator; the second, by a horse falling upon the patient. The interesting features of this dislocation are well shown in the photographs, which I will now pass around for your inspection. (See woodcut.) In the case before you there was also marked inversion of the foot, almost precisely as in the other case. There was, however, in this case, as you will notice in the specimen, a fracture with separation of a small portion of the articular facet of the astragalus, which remained in place, between the malleoli. In both cases the tibia and fibula were intact.

The first patient, as you remember, was a man over fifty years of age, and his condition was such as to demand amputation of the leg. But we were unable to establish reaction in order that an operation could be performed, and he died of shock three hours after his admission into the hospital, January 19. In his case, you will remember there was no fracture; simply a compound, sub-astragaloid dislocation of the tarsus inwards. He also received serious internal injuries, from which he died. As I told you, the results of resection after compound dislocation of the ankle-joint were not generally favorable in a man of his years and mode of life. In the present case, although he was willing to submit to amputation, we thought, after a consultation of the sur-

gical staff, that we would be justified in making the attempt to save the foot by resection of the astragalus.

This patient is a German, fifty years of age. He is a large, robust man, apparently of drinking habits, although he says he was not intoxicated when the

removed with the bone-forceps, and after a drainage-tube had been introduced the wound was brought together, dressed with lint and carbolized oil, and the entire extremity placed in a fracture-box and covered with bran to absorb the discharges.



accident occurred. He was walking along on the ice, leading his horse, when the animal fell over upon him, crushing his leg under him.

Finding, after removing the remainder of the astragalus, that the end of the fibula projected so as to interfere with drainage, the projecting portion was

I am very glad to have had the opportunity of presenting these cases to you, as they are so rare that the possibility of their occurrence has been doubted by some surgeons.

[The patient did well for a time, but ultimately developed symptoms of pyæmia, of which he died, February 28.]

Perforation of the Appendix Vermiformis; Treatment.

In the earlier cases of perforation of the appendix placed on record, venesection seems to have been generally trusted to as the only means of cure, under the impression that the disease was of a purely inflammatory character. It is scarcely necessary to say that such treatment proved of little benefit, inasmuch as the inflammation was the result of the introduction into the serous sac of a decomposing, or at any rate of an irritating material, which no amount of blood-letting could remove. Its only effect was to lower the vital powers of the patient, and thus to diminish his chance of recovery by adhesion of the

injured part to some of the neighboring organs. And other cases were treated by the use of drastic purgatives, on the supposition that the symptoms resulted from intestinal obstruction; but although in most cases the bowels were readily opened the fatal termination of the disease was not thereby obviated. On the contrary the use of aperients proved to be so detrimental that they were entirely abandoned in this as in other forms of peritonitis. Of late years opium has been generally employed, but there has been no diminution in the mortality of the disease. I have prescribed it in every case that has come under my notice for some years, either alone or with belladonna; it has always relieved

the pain, lessened or subdued the vomiting, given sleep, and proved an immense comfort to the patient, but in no single case has it appeared to avert the fatal termination.

Another plan of treatment has, however, been successfully adopted, viz., that of laying open the abscess formed around the perforation and allowing the pus to escape. The earliest case on record is one performed by Mr. Hancock, which ended in the recovery of the patient. Twenty years afterward, Dr. Parker, of New York, operated upon a case successfully, and Dr. Gordon Ruck, of New York, has collected thirteen cases of this operation, of which twelve recovered and only one died. I have twice advised this procedure. In the first case it was not performed until the patient was evidently sinking, but pus was found and evacuated; in the second, which was a very chronic one, the abscess was opened and recovery ensued. I have before mentioned that fluctuation can rarely be distinguished in abscesses of this kind, and out of ten recorded by Dr. Ruck it could be felt in only one, proving that there is no necessity to wait until this sign of abscess can be discovered. None of the above cases were operated on before the seventh day, and, with one exception, the operation was not attempted until between the seventh and the fifteenth day; but we have already seen that forty out of fifty-seven cases died during the first week of illness, so that if the rule should be followed, as has been hitherto laid down, of waiting until the pus is completely localized by adhesions, the operation will be restricted to a very small number of those who are attacked with this formidable malady. Theoretically it would seem to be much better if we could cut down upon the appendix as soon as the diagnosis was tolerably

certain, tie it above the seat of the perforation and remove from its neighborhood any concretion or decomposing material that might be the cause of irritation. The only objection that I can see to an early operation is that adhesions to the neighboring organs might be prevented; but when we reflect how very rarely the fortunate termination occurs, and how certainly death follows if it does not take place, we may, I think, dismiss the objection from our consideration. But even when adhesion does result from perforation the fatal issue is in most cases only postponed, for, as we have before shown, the adhesions are often torn asunder by some undue exertion of the abdominal muscles and fatal peritonitis ensues.

Two methods of operation have been pursued: In one an incision has been made directly into the suppurating part and the pus at once evacuated; in the other the incision has only been carried down to the fascia, and either the pus has been allowed afterward to escape spontaneously or an aspirator has been passed into the most depending portion of the swelling and the contents thus evacuated. It is evident, however, that if an operation were performed at an early period the incision must be carried down directly to the injured part, for we cannot suppose that pus would be formed and localized until many days after the perforation had taken place.

The choice of the method of operation must of course be left to the discretion of the surgeon, and will probably require to be varied according to the circumstances of each case. Of one thing we may be quite certain, that no drugs are likely to be of much avail; for your common sense will tell you that when you have an irritating material suddenly introduced into a large serous sac the only chance of giving

relief is to remove it, and thus put a stop to the original cause of the mischief. The office of the physician, therefore, will most likely become restricted to diagnosis, and it is only by carefully watching the first symptoms and the physical signs of the disease and by comparing them with those of other disorders that may simulate it, that we shall be able to arrive at such a correct judgment as may justify the employment of surgical measures at an early period of the case.—*London Lancet*.

"Mixed" Anæsthesia.

The practice of preceding the inhalation of chloroform or ether by a subcutaneous injection of morphine or of atropine is advocated by Columb (Lyon méd), who states that the narcosis is more rapidly induced and more complete, that the unpleasant after effects are avoided, and that the atropine diminishes the irritability of the cardiac ganglia, thus lessening the danger of paralysis of the heart.—*N. Y. Med. Journal*.

The Management of Patients During Etherization.

Dr. H. L. BURRELL thus concludes a paper on this subject in the *Boston Med. and Surg. Jour.*:

1. Before etherization, the surgeon should satisfy himself regarding the presence or absence of heart disease.

2. The safety of the patient and the comfort of the etherizer largely depend on the use of pure anhydrous sulphuric ether.

3. The best medium for the administration is one in which the ether can be given in a condensed form or largely mixed with air.

4. As a rule, the patient should have a brief, clear description of the sensations he is about to experience.

5. A room free from bustle and confusion before and after an operative procedure is an essential for quiet etherization.

6. Ether should be administered on an empty stomach.

7. The knowledge of the effect of a glass of wine upon a patient is frequently an indication of the exciting or stupefying effect that ether may have.

8. No mechanical impediment should exist to respiration.

9. The pulse and respiration are the safeguards of etherization.

10. The less ether used in an operative procedure, the better the recovery of the patient from the immediate effects of the operation.

11. A little ether in children goes a long way.

Remaining, we have a number of questions on which, possibly, there is difference of opinion. The following suggest themselves to my mind:

The comparative value of the different brands of ether?

Whether it is better to pull the tongue forward or to push the jaw forward?

Whether any patient exists that cannot be etherized?

The comparative value of a sponge, towels, and inhalers?

The use of opiates and stimulants as adjuncts to etherization.

The Use of the Leech.

The use of the leech is much more common abroad than with us, and more especially in France and Spain, where the climate lends itself more to the application. The foreign apothecary keeps a larger quantity in stock, and few of them are without their 400 or 500 where our countrymen limit themselves to 25. Leeches were already going out of fashion when, in 1870, blood-letting received a severe shock from the death of

Count Cavour, whose end was hastened by its injudicious use, but his death threw additional discredit on the practice in Europe, and since that year the sale has declined more rapidly than in the twenty previous. Poultices and fomentations have taken their place, because they are generally found sufficient, and are certainly in every respect handier, but we imagine with the result that nowadays the patient is longer under the doctor's hands than he used to be. We have been told, not, as may be guessed, by a member of the profession, that the greater popularity of the lotion over the leech is to a certain extent due to the fact that the smaller practitioners have found they can make more out of the former than the latter; but as on inquiry it appears that those against whom this charge (if it be a charge) is brought as a rule dispense their own medicines, and can make as much if they please out of leeches as out of lotions, this explanation scarcely holds good. It is more likely that they find that the idea of bleeding and biting frightens their patients. Still it is true that in many cases, for instance those of accident, the relief given by the leech is speedier than that afforded by the lotion; and we have ourselves seen a black eye received in combat in the neighborhood of Pentonville road, visibly lose its suffused aspect under the leech's bite, and a knee swollen by a cricket ball subside like the ocean after a storm. With a courageous patient, who is not particular as to the means so long as he arrives at the result, those instances are likely to be lively arguments, and more especially with men whose time is emphatically money, or with those who desire to cure their lameness quickly for a county match, and find themselves tied to bed and the wet compress instead.—*The Cornhill Magazine*.

Cocaine in Rectal Surgery.

The *Lancet* says that cocaine seems destined to play an important part in the treatment of painful affections of the rectum and genito-urinary system. Dr. BETTELHEIM, of Vienna, reports the case of a man, aged seventy-four, who had well marked anginal attacks, the result of atheroma of the aorta and ossification of the coronary arteries. For some time he had, in addition, complained of rectal and vesical tenesmus. Percussion over the bladder showed that it was not dilated, and rectal examination demonstrated the fact that the prostate was much enlarged and probably the cause of the trouble. Cacao butter suppositories were ordered, each containing half a grain of muriate of cocaine. One of these was introduced into the rectum at bedtime, and the patient slept well, and was not troubled during the night. The beneficial effects were apparent the whole of the following day. The suppository was not given that evening, and the patient passed an uncomfortable, restless night. The next day another suppository was ordered, and acted as well as the first. From the promptness and efficacy of the cocaine in this case, a brilliant future may be anticipated for the alkaloid in this department of surgery. It is now being largely used in many of the London hospitals in the treatment of piles, fissure and fistula.—*Med. & Surg. Reporter*.

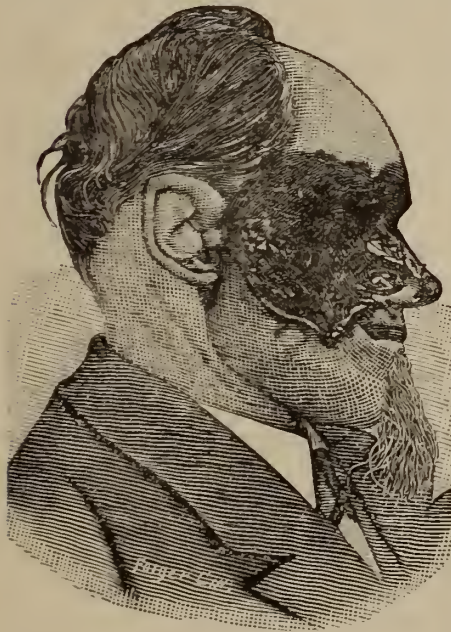
Wound Dressing.

A "new" method of dressing wounds by which their healing is said to be hastened and the pain made to disappear at once has been brought into public notice by a French surgeon, though it has for ages been practiced by skillful old women, who used to dampen the

soft linen cloths for covering the dressings of superficial wounds with a weak infusion of valerian root. The French surgeon applies the compresses wet with a decoction of 30 parts of the same root in 1,000 parts of water. He states expressly that this treatment is of no avail in the case of deep wounds.

A Case of Rodent Ulcer.

In a highly interesting and exhaustive paper on the above subject, in the *Cincinnati Lancet and Clinic*, Dr. J. C. McMECHAN describes a patient aged 64 who in 1864 noticed a little dry, brown scale or pimple at the internal angle of the eye. It itched, and he was in the habit of picking it, causing it to bleed



freely. At the end of two years it was as large as a pea, and the eyelid was slightly swollen. At the end of five years there was an opening as large as a bean. It had an indurated border and caused a burning sensation. In ten years it had involved both eyelids. At

fifteen years the lids were gone, the eyeball atrophied. During the last year the ulcer has grown rapidly, and July 2, 1884, it had destroyed the whole right eye and eyelids, entire cheek, part of the upper jaw, two-thirds of the nose, and covered a space at least five inches in diameter; no special pain. The progress of the disease was checked by the galvano cautery at various times; it was pronounced epithelioma.—*St. Louis Med. & Surg. Jour.*

How to Cure a Felon.

Dr. C. C. GRATIOT: "Take common salt, roasted on a hot stove until all the chlorine gas is thrown off, or it is as dry as you can make it. Take a teaspoonful, and also a teaspoonful of pulverized castile soap, add a teaspoonful of Venice turpentine, mix them well into a poultice, and apply to the felon. If you have ten felons at once, mix as many poultices. Renew this poultice twice a day. In four or five days your felon will, if not opened before your poultice is first put on, present a hole down to the bone, where the pent-up matter was before your poultice brought it out. If the felon has been cut open or opened itself, or is about to take off the finger to the first joint, no matter, put on your poultice; it will stop it right there, and in time your finger will get well, even if one of the first bones is gone. Of course, it will not restore the lost bone, but it will get well soon."

So far as my faith went in the treatment of a felon in that way, I never would have tried it. My patient came back to me in four days, with pain and throbbing all gone, and with no tenderness or swelling. Upon removing the poultice there was a round hole down to the bone, discharging a bloody, thick pus, such as I have sometimes seen come from acute ulcers. He stated that after

the first application of the poultice, about eight hours after he left my office, he suffered no more pain; in three days more he was almost entirely well. This induced me to determine to try it on other felons that I might be called upon to treat; and from July to the middle of October a great many felons occurred among the farmers, caused by the frequent handling of pitchforks in making hay, and in stacking and threshing grain. Suffice it to say I tried it on seven cases of felon, and it never once failed me. It is simple in preparation, and the soap and salt are always at hand, which with a few cents' worth of Venice turpentine will make many poultices. The cases in which I used it got well more rapidly and suffered less pain, and the finger regained its normal condition more quickly than after incision or any mode of treatment I had ever previously adopted.—*Coll. and Clin. Record.*

How to Prepare Antiseptic Dressings of Mercuric Bichloride.

Dr. CHARLES MEIGS WILSON (*Med. Times*): Corrosive sublimate is soluble in water in the proportion of thirty grains to the ounce. Various vehicles have been employed, as glycerin, ether, alcohol, or the latter in equal parts and water. Of all these the preference should be given to water as a medium, because of its capability of imbibition and solution, and the readiness with which it may be obtained. Sufficient sodium chloride should be added to solutions of the sublimate (an equal part) to prevent the latter's decomposition and the formation of calomel. In hospitals it is possible to have the solutions freshly prepared and frequently renewed, but in private practice this is not always feasible, especially if the case be of long duration and at a distance from a drug shop. A convenient solu-

tion for private use, and one which will keep indefinitely, is the following: Hydrarg. bichlor., 3 ii.; sodii chlorid., 3 i.; aquæ destillat., f 3 iv.—M. One fluid drachm of this, added to a pint of water, makes a solution of about one to a thousand. Sir Joseph Lister makes use of the following formula in preparing solutions of corrosive sublimate: One drachm by weight of a solution, one part of corrosive sublimate in one and one-half parts of glycerin, contains two-fifths its weight, or twenty-four grains, of the sublimate. This multiplied by one thousand (the proportion of water required) gives twenty-four thousand grains, or nearly three pints. It is, however, much more convenient to use fluid measure than weight, and one fluid drachm of the glycerin solution referred to requires four pints of water to produce the one to one thousand solution. Surgical authorities are pretty well agreed that one to one thousand is the proper solution to use for douching, washing, and dressing wounds. For vaginal or uterine irrigation, one to two thousand is the proper strength, and no stronger solution should be used in abdominal surgery. The best medium in which to use the corrosive sublimate for surgical dressings is finely pulverized wood. This may be obtained at a number of the instrument makers' and drug shops. The wood-wool is sterilized by being subjected to a dry heat (above 220° F.). It is then soaked for twelve hours in a one-half per cent. solution of corrosive sublimate; afterwards it is spread out and dried. It is then placed in a bag of gauze (such as is used for the Lister dressing) or mosquito-bar netting, prepared by being saturated with the following solution: Corrosive sublimate, gr. x.; alcohol, f 3 ix et f 3 ii.; glycerin, f 3 i et ʒ xx.

This dressing is applied dry. Care

should be taken to apply the dressing so that the margins of the bag extend an inch or so beyond the margins of the wound. This dressing is capable of absorbing twelve times its weight of water. It is applied with the ordinary roller, and requires no mackintosh or covering.

In cases in which there is a moderate amount of suppuration this dressing may be left until the external dressing becomes soiled. The wood-wool prepared according to the above formula is the dressing which is almost exclusively used at St. Thomas' Hospital and many of the other London hospitals. The following formula I take from the report of St. Mary's General Hospital, Brooklyn, N. Y. Dissolve six grains of the corrosive sublimate in a half-ounce each of ether and alcohol. Dissolve twenty-four grains of the chloride of sodium (added to prevent the decomposition of the sublimate and formation of calomel) in an ounce of glycerin. Mix the two solutions, and triturate well with one pound of wood-wool; spread out to dry, and, after the ether and alcohol have evaporated, mix well with one part to ten by weight of powdered naphthaline. Thus prepared, we have a dressing that can be applied in a dry state, will absorb twelve times its own weight of water, is easily prepared, is simple, readily applied, and, above all, fulfils all the requirements of a true antiseptic dressing. The combination of these two agents gives us the most powerful germicide we know of—viz., corrosive sublimate—thus insuring a perfectly aseptic dressing, which, while it prevents any decomposition of the secretions of the wound, offers but a slight obstacle to germ-laden air, and the naphthaline constantly given off in a gaseous state by the heat of the body maintains a true antiseptic atmosphere around the wound. Naphthaline is non-

poisonous, has established antiseptic properties, and appears to exert a specific influence over the contagion of erysipelas. The wood-wool prepared in this way is used as a dressing in precisely the same way as that prepared by the first formula. The indications for renewal are the same as those in any other form of antiseptic dressing. The simplicity of these dressings is their great charm, and renders them especially applicable for primary dressings. Equipped with a few bags of this dressing and few roller bandages, the ambulance surgeon would be ready to place a wound almost immediately after its occurrence under antiseptic conditions. This is important in all cases, but especially so in cases of penetrating wounds, compound fractures, and other severe injuries.

The following precautions should be used in operations. Before the operation, the parts should be freely douched with the 1-1000 solution. An asepticised ligature (pure silk is preferable) should be used. All hemorrhage should be checked temporarily with the Billroth artery-forceps, until a ligature, if one is needed, can be applied. Before the wound is closed it should show no evidences of hemorrhage; and before the final stitches are placed *in situ*, the innermost recesses of the wound should be well *flooded* with the 1-1000 solution. The same solution should be used to asepticise the sponges, and in the interim between operations they should be left to soak in a one-per-cent. solution. When it is desired to wash out the uterus, as in cases of puerperal septicæmia, 1-2000 is the proper strength to employ. In uterine irrigation the method by simple hydrostatic pressure should always be used, as otherwise there is danger of introducing air with a syringe.

Ingrowing Toe-Nail.

T. D. KING publishes a method of treating ingrowing toe-nails, which he has found very successful, and which presents some new features. He holds the condition to be one of an overgrowing fold of skin from pressure of adjacent toe on side of boot, rather than an actual ingrowing of the nail, and the new points in his method are based on this view of the trouble :

Scrape or gouge out a narrow groove in the centre of the nail from its base to its free margin, making the nail so thin that when either side is lifted it will turn on this groove as on a hinge, and will not press the opposite side of the nail down into the flesh. Force a small piece of cotton under the edge of the nail on the sound side of the toe. Then take an oblong piece of cotton, as long as you judge you can possibly use for the purpose, and force the centre of it as far under the irritating point and buried edge of the ingrowing nail as the patient can bear to have it. A very gradual, interrupted introduction of the cotton will cause the minimum of pain to the patient. Then pack one end of the cotton around under the lower margin of the nail. Fold the other end back upon the nail, and push it as much as possible under the flesh at the side and base of the ingrowing nail.

Up to this point there is nothing new in treatment, except, perhaps, the folding over of one end of the cotton so as to form a compress along the inner side of the flesh which has overlapped the ingrowing nail.

Now, take a bandage of muslin, as broad as the toe is long, and about a foot and a half in length, and place the initial extremity underneath the affected toe. Carry it up on the sound side of the toe, over the toe, down over the in-

growing nail, and beneath the toe which lies against the ingrowing nail ; then up on the far side, and back over the top of that toe ; over the top of the affected toe again, down on its sound side, and under it, thus fixing the initial extremity of the bandage.

Then, lifting the adjacent toe in the loop you have made around it, pull it as far as possible up over the top of the affected toe, and fasten it there by carrying the bandage beneath both toes and making circular turns around the two, held in that position until the bandage is exhausted. Having made as firm pressure as possible without causing pain, fasten the bandage with a pin on top and between the two toes.

Often the bandage may have to be comparatively loose when first applied, but in a day or two it will be found that it can be made very tight without discomfort or pain.

When first put on, this bandage will feel very uncomfortable to the patient ; but, if a well-fitting shoe (not a tight shoe) is worn, and the patient goes about his or her usual occupation, in an hour or two this uncomfortable feeling wears off, and the ingrowing nail is forgotten.

Fresh cotton should be put under the nail every day, in the manner described, till it can be pushed back under the edge of the ingrowing nail almost to its base. After that the cotton need be changed but once a week, unless it becomes wet from any cause, when it should be immediately changed.

The bandage may be removed at bedtime, and replaced on arising in the morning, if it occasions any discomfort when worn at night.

The groove in the centre of the nail must be constantly renewed as the nail grows out; and the nail must be trimmed square across when it gets too long for comfort. It should never be trimmed

closely, nor should the corner ever be rounded off in trimming it.

This treatment ought to be continued until the adjacent toe has acquired the habit of remaining above the ingrowing nail instead of below it, for it will be found that the majority of ingrowing nails are caused by the adjacent toe, which presses the flesh up over the ingrowing nail.

It will be observed that this method of treatment cannot be used when the ingrowing nail is on the inner side of the big toe, or on the outer side of the little toe. In such cases the nearest approach possible to this treatment will be the use of a piece of cork in the manner suggested by Prof. Agnew.—*Med. Age.*

The Significance of Powder Mark in a Case of Questionable Suicide or Homicide.

In a very valuable article on "The External Appearances of Pistol Shot Wounds," by D. B. N. FISK, of Amherst (*Boston Med. and Surg. Jour.*), the author discusses at length the varied appearances of bullet wounds under the manifold conditions which necessarily arise. He gives a more thorough explanation of the varied appearances of the wound of entrance and exit, than we had before seen, and shows that the difference in appearance between the entrance and exit wounds depends largely on the distance at which the shot is fired. The principal interest, however, of the paper lies in the peculiar mark which is left by the powder, in its varied conditions of non-ignition and partial and complete combustion. He finds that whenever the pistol is held at distances from four to fourteen inches, according to the size, and charge of the weapon, the exact direction, relative to the hammer, in which the pistol has been held can be ascertained by the

powder mark which surrounds the bullet hole. It will readily be seen that this question is one of considerable importance in determining a question of probable suicide or homicide, as it would be absolutely impossible for an individual to hold a pistol in certain positions in order to shoot himself. In summing up the part of his subject which refers to smutting or powder burning, Dr. F. says:

I offer you, then, what I believe to be a new and almost infallible rule for determining the position of the weapon:—

Whenever this burned, or burned and smattered, spot is found, either upon the skin, the hair, or the clothing, at one side of the wound made by the bullet, by placing the muzzle of weapon upon the wound so that the line of the hammer and sight will meet a line drawn from the centre of the wound through the centre of the spot of burning, or of burning and smutting, you will have the exact position of the weapon when it was fired. By position of the weapon, I do not mean the distance at which it was fired, nor its angle to the body; the latter does not seem to modify the rule I have given. As some revolvers of large calibre and short barrel will sometimes produce the greatest smutting opposite the point of greatest burning, the latter must be understood in such cases as the spot to which this rule is to be applied.

After discussing these marks at length Dr. F. thus gives his summary relative to distance, position of weapon, accidental wounds, homicidal wounds and suicidal wounds.

Distance. 1. From a great distance the entrance wound will usually be large and irregular; there will be absence of any great degree of lividity of its edges, and absence of the marks of powder. The wound of exit, if one is

present, will usually be larger than the wound of entrance. At any distance the edges of wounds of entrance will usually be inverted, those of exit averted.

2. From a short distance the entrance and exit wounds will generally be nearly equal in size ; the edges of the former will be blackened, and powder grains will be imbedded in the skin, but there will be absence of the scorplings and brandings of powder.

3. Close to the body the entrance wound will generally be larger than the exit. There will often be, in addition to the tattooing of the skin by unburned grains of powder, a mark or brand made by the flame of the gases and of the burning powder, by the soot of the partly burned powder, and by the residue or ash of the wholly burned powder. As a rule this brand, which may consist of a burning alone of the hair, the skin, or the clothing, or of a burning and blackening of the skin or clothing, will appear at one side of the bullet hole.

The position of the weapon (and whenever this term is used I wish to be understood to mean not its angle to or distance from the body, but the manner or position in which it is held, that is, whether it is held with its hammer and sight above the barrel, as in the usual position for firing, or with the hammer and sight below the barrel, as when the weapon is turned upside down, or in any other position of the hammer and sight relative to the barrel of the weapon) is to be determined by the following rule : When the brand appears upon the hair, the skin or the clothing at one side of the bullet hole, hold the weapon with its muzzle to the bullet hole so that the line of its hammer and sight will meet a line drawn from the centre of the bullet hole through the centre of the brand,

and it will show the exact position of the weapon when fired.

This rule is deduced from the newly-discovered fact that, owing to the recoil of the muzzle of the weapon in the direction of its sight, this brand, when it appears at one side of the bullet hole, will appear upon that side which corresponds to the side of the hammer and sight in their position relative to the bore or barrel of the weapon. That is if the weapon is held upside down the brand will appear below the bullet hole.

Accidental wounds are generally near wounds. When inflicted from a distance they cannot be distinguished from homicidal wounds. In shots fired near by, when a person is known to have been shot while standing, an unnatural position of the weapon, as shown by the location of the brand, will tend to corroborate a claim of accidental shooting. So, if one is known to have shot himself, an unnatural position of the weapon will show that the shot was probably accidental. The location of the wound and the course taken by the ball may also characterize the wound as accidental.

Homicidal wounds inflicted within the suicide limit have heretofore been distinguished from suicidal wounds alone by the location of the wound and by the uncertain evidence presented by the trajectory of the ball. When the location of the wound has been such that a person might easily have inflicted it upon himself, there have been no means of determining from its character whether it was homicidal or suicidal. To aid in distinguishing between such wounds I offer the following rule : When the location of the brand, relative to the bullet hole, shows that the weapon has been held in a position of its hammer and sight impossible or improbable for a suicide, it is probable

that a murder has been committed. Certain relative locations of this brand may also indicate that the victim has been shot while in a reclining position.

Multiple wounds are usually homicidal, but may be either accidental or suicidal.

Shots fired beyond the usual suicide limit are probably homicidal.

Suicidal wounds. It is said that the suicide rarely holds the muzzle of his pistol at more than eight inches from the body. Suicides generally fire at the side or front of the head, next at the heart; they sometimes fire at the back of the head.

The distance from the body at which the weapon must be held to show the brand plainly is probably very nearly as follows: for small pistols and revolvers not over four to six inches: for large weapons of this class not over twelve to fourteen inches.—*Weekly Med. Review.*

VENEREAL DISEASES.

Telescopic Catheterization.

Dr. A. E. DUGAS, of Augusta, Ga., sends us an account of a method employed by him in cases of retention from so-called impermeable stricture of the urethra. He takes the largest sized gum-elastic catheter which will enter the meatus, passing it down until arrested at the narrowed portion of the urethra. It is then withdrawn cut off just above the eye, the edges smoothed off, and then reinserted. When it has passed as far as it will go the end is cut off about an inch from the meatus, and the rest of the tube tied so as to prevent slipping from the canal. Now another catheter is chosen of a size that

will just pass through the one *in situ*, and is inserted as far as it will go. It will probably pass farther than the first one, but if not, a smaller size must be selected. If this do not enter the bladder it is to be passed as far as possible and then the eye cut off as in the first case. Now a third catheter passed through number two will almost surely enter the bladder, except in the very worst cases. The larger or outer instruments serve, Dr. Dugas states, not only to ward off and exhaust the contractions of the urethra, but also to act as a stiff handle to direct and guide the smaller and more flexible instruments passing through them.

In connection with this subject the writer states his belief that a great many more cases of retention of urine are due to some derangement of the kidneys than to the urethra. And he says that he has "frequently relieved such cases like magic by a dose of nitrate of potassa, say ten or fifteen grains, twice a day or oftener. The trouble is not that there is too much water in the bladder but that what water is there is very irritating, and the urethra being more or less strictured revolts against its passage.—*Med. Record.*

Tincture of Anemone in the Treatment of Orchitis.

MARTEL, in a letter to Dujardin-Beaumetz (*Bull. gén. de thérap.*), mentions several cases in which he has observed improvement after the use of this drug. He discusses the question of its specific action, but is unable to decide it. He remarks that, in its sedative properties, anemone resembles aconite and adonis.—*N. Y. Med. Journal.*

Internal Urethrotomy for Stricture of the Urethra.

It is universally admitted that it is dangerous to neglect urethral stricture, as retention of urine, perineal fistulæ, cystitis, and suppuration of the kidney are the most serious, and at the same time the most common consequences. Dr. WALTER COULSON describes in the *Brit. Med. Jour.* the operation of internal urethrotomy, as performed at St. Peter's Hospital, London :

A fine flexible guiding bougie, equal in size to No. 4 or 5 F. is passed into the bladder. The staff or sheath of the urethrotome is then screwed on to the guide, passed through the stricture into the bladder, and held in position by an assistant. The operator, with his left hand, seizes the penis just behind the glans and draws it forwards; with his right hand he pushes the stem of the sheathed knife down the urethra until the obstruction is reached; the knife is then protruded, and all resisting tissue in front of it is divided. The incision is thus made in the roof of the urethra. The knife is then withdrawn into its sheath, which is pushed along the urethra in order to ascertain that the division has been complete. If it be so, the instrument is immediately withdrawn. A full-sized silver catheter is then passed; the bladder is emptied, and the catheter is at once withdrawn.

It occasionally happens that some difficulty is experienced in the introduction of the catheter after the operation. In some cases this is due to the staff having been held too far out by the assistant, so that the stricture is not completely divided. But this difficulty will not be experienced if the sheath be found to pass freely through the stricture after division. If it meet with an obstruction, the incision must be repeated. The passage of a full-sized silver cathe-

ter suffices to prove that the calibre of the urethra has been restored to its normal dimensions.

With regard to the after-treatment, the ordinary course is as follows: Immediately after the operation, the patient, of course, remains in bed; hot bottles are applied to the feet, and three grains of quinine are given with half an ounce of brandy. A little warm beef-tea is also given from time to time. If no rigors occur, the patient has a hot bath at night, and forty-eight hours afterwards a French bougie, corresponding in size to the catheter used after the operation, is passed along the urethra. The patient is then allowed to get up. The bougie is passed every three or four days, and, at the end of ten or fourteen days, the patient is taught how to use the instrument himself. When he is able to do this satisfactorily, he is discharged and attends as an out-patient, with instructions to use the catheter once a week. He is kept under observation for as long a period as he can be induced to attend.

After observations upon 206 cases, Dr. C. believes that a permanent and radical cure will result, provided that the stricture has been sufficiently divided to allow the introduction of a full-sized instrument, and the patient has learned the art of passing the bougie himself.—*Med. and Surg. Reporter.*

For Gonorrhœa.

Dr. F. E. MICHAEL (Baltimore) highly recommends the following mixture in gonorrhœa and its vesical complications: $\mathcal{R}$ Ol. santal., liq. potassæ., ætheris nit., tinct. cinnamoni, aa $\frac{\text{ss.}}{3}$, mucilag. sem. lina., $\frac{\text{ss.}}{3}$ iv. M.—Sig. One dessert spoonful three times a day.—*Med. World.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

A Ready Method for the Production of Local Extension in the Treatment of Fractures.*

Dr. CHARLES F. STILLMAN (*Medical Record*).

Local extension of a limb is indicated in cases of simple fracture, where shortening is likely to ensue, and also in fractures which are compound or comminuted, and the method for its production, to be detailed in this paper, will be found possessed of so much simplicity and applicability as to commend itself to surgeons without very strong advocacy on the part of the writer. In local extension only the parts about the seat of fracture are stretched, while in exten-

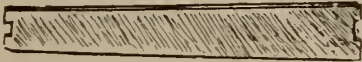


FIG. 1.

sion, as usually practised by means of a weight and pulley, or the long extension splint, the stretching is not limited to the affected part of the limb alone, but involves the entire limb.

It would seem, theoretically, if thorough extension of the part could be produced by means of traction force directed so as to produce stretching of the injured part alone, that the fracture would be placed in the best condition for prompt repair with a minimum of deformity; and in reality this is true, because, when properly adjusted, such a dressing not only insures better fixation of the fractured bones during the period of repair, but at the same time the traction can be regulated day by day, without the necessity of the re-

moval of the splints from the limb; and in compound or comminuted fractures the parts can be dressed and local treatment pursued without disturbance of the fragments or removal of the splint.

As an illustration of this method for the production of local extension, we will suppose an instance in which the fracture has taken place in the forearm, midway between the wrist and elbow. The requisites are: First, two stout wooden splints, notched at each end, as in Fig. 1; second, some strong moleskin plaster (the double-twilled, prepared for extension of joints, is best); and third, some strong webbing strips.

First cut *four* strips of the moleskin plaster of sufficient length to encircle the arm, and from two to three inches in width.



FIG. 2.

These should be cut in the fan shape (shown in Fig. 2), and have strips of the webbing sewed to them, as shown in the same figure.

To the end of *two* of these strips buckles should be attached.

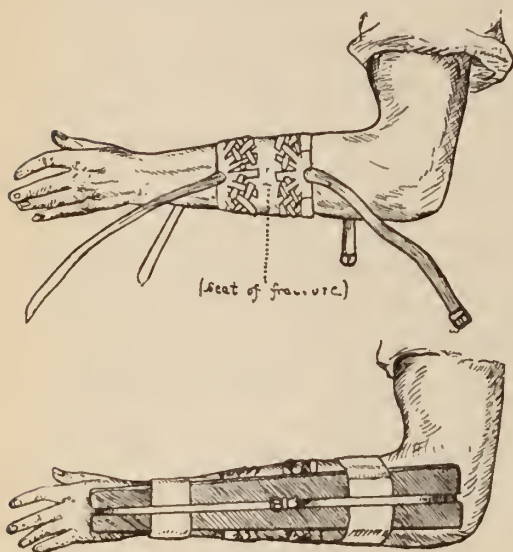
To apply the splint the four adhesive strips should be placed upon the forearm, two above and two below the seat of fracture, and on opposite sides of the arm, the extremities interlacing, as shown in Fig. 3, care being taken to avoid covering the seat of fracture. The wooden splints are now to be placed, one on either side of the arm, and held there in position by circular strips of adhesive plaster in the usual manner.

The next step consists in drawing the webbing strips through the notches at the end of the splints, on each side of

* Dr. JOHN SWINBURNE, of Albany, read a paper before the Medical Society of the State of New York, in 1861, advocating extension in the treatment of fractures of the long bones, but his method for its production differs materially from that here described.

the arm, and buckling them together, as in Fig. 4.

It will readily be seen that the tighter these linear straps are drawn together and secured by the buckles, the more



FIGS. 3 and 4.

stretch will be produced upon the parts over the seat of the fracture.

If the fracture is near a joint the splints must be carried beyond that joint sufficiently to immobilize it, but if in the middle of a shaft, fixation of the joint is not a necessity if the local stretching is thoroughly effected.

It may be also suggested whether rubber webbing could not advantageously be substituted for the non-distensible form advocated by the writer.

It would seem, however, that its continuous action would be more apt to produce non-union of the fragments, and at the same time it would certainly cause the adhesive plasters to cut more deeply into the tissues, than if the extension was produced by the rigid webbing.

For fracture of the thigh, *four* short splints are used, about the length of the thigh itself, and notched in the same

manner as those used for the forearm. These will require *eight* fan-shaped moleskin strips, to each of which a webbing strip should be attached, as already depicted.

These should be interlaced above and below the fracture, and the webbing strips drawn tightly over the ends of the wooden splints, which are to be placed on the four sides of the thigh.

Traction can now be secured as in the forearm, and is maintained and regulated at the will of the surgeon. In most cases it will be found preferable to extend the posterior splint above the hip and below the knee, and secure immobilization of these joints for the first few weeks, but the lateral and anterior splints are not changed.

This method of treatment allows the surgeon to secure a more perfect coaptation of the fragments, and to maintain and adjust the extension; since the latter depends entirely upon the degree of traction which is exerted. The adhesive dressings, when interlaced in the manner just detailed, not only do not

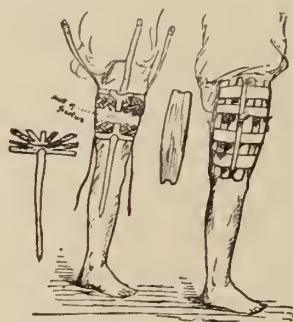


FIG. 5.

slip, but any increase in the traction causes them to embrace the limb more firmly, and, when the strips of webbing are drawn over the ends of the wooden splints and buckled together, such traction as is exerted is held securely, provided the splint itself be of sufficient

thickness not to bend under the linear strain.

It is a difficult matter to disarrange the fragments if they have been properly adjusted and secured by the method just described, as the traction causes the parts over the seat of fracture to become stretched, consequently causing perfect fixation of the part by forcing the tissues themselves to act as a local and secondary splint, in addition to the remainder of the apparatus.

Metallic Band for Fractured Patella.

Dr. S. J. PARKER, (*Polyclinic*).—Some years ago, while at the South, I had a case of transverse fracture of the patella. A cut to the bone, half an inch below the transverse line of the fracture, and not connecting with it, suggested a metallic screw, to be inserted through and hold both fragments together. I had a machinist make a twenty-dollar gold piece into a screw with thumb wings on each side of one end. The next day, with a carpenter's brace bit, I cut out a hole through the lower fragment, and partially through the upper fragment of the patella. The lower I enlarged by another bit, to be slightly larger than the gold screw bolt, and I screwed it in with a firm pressure of the two parts together; the upper held by the coarse thread of the bolt, the lower by the wings of the bolt, by which I turned it in. I extemporized wood clamps, which being kept in place by an assistant on each side of the patella, held the fragments together while cutting the brace bit holes in them.

This has lately suggested to me to recommend that in intracapsular fracture of the head of the femur, with the present use of antiseptics, a similar non-corrosive screw bolt might be used.

The external trochanter is easily reached and there would be no difficulty in puncturing that. The difficulty would be to accurately co-adjust the head with the femur (but that would be no more difficult than other niceties of surgery) and to puncture the head fragment; if the round ligament was not ruptured, a drill could be made to cut the hole for the screw into the head of the bone; and the further difficulty of holding the head fast to put in the screw in its place. But if done, there would be less difficulty in these fractures, that exhaust the patient, and injure permanently his constitution by the confinement for months in bed. If the round ligament is ruptured, or in extracapsular fracture, I see no more danger in a larger opening, down to and about the articulation, and adjustment of such a device, by the aid of any mechanical means that seems fit to hold the fragments together. The bolt head could be easily adjusted to project beyond the soft parts, when the wound was closed, and by which the bolt could be removed, when bony union had taken place.

The case was under my care and inspection a year and four months. The gold screw bolt was applied, as said, and there was a compression bandage used some three weeks. I cannot now say how long I left the screw rod or bolt in; about a month or six weeks, probably. The limb was put on the floor at once, but for ten days in a chair elevated. No splint was used. In three weeks the patient walked out into the street as had been the case in the house before. The union appeared to be bony; but this has been said to be impossible in any patella fracture, as "the union is always by ligamentous tissue." This I do not believe. The recovery was perfect. At the last time I saw the patient, nothing was left to

show the injury, except an elevation of what seemed to be bony deposit over or in the line of the fracture.

Remarks on Hæmostatic Forceps.

Dr. ROBERT F. WEIR, in an article published in the *Medical Record*, says :

The removal of a tumor of the neck overlying the vessels and nerves at the upper or lower part of this region, or

ant. If, as is often the case in the deeper dissections, an artery or vein is recognized, it may be seized by the forceps and then divided between there and the end ; if of a large vessel, tied immediately, or, as is much better, the vessel may be tied with two ligatures, and cut between them. Generally, as each vessel is caught by the forceps, or clamps as they are also called, the instrument is either allowed to hang in the wound, or



FIG. 1.—Bilroth's Forceps.

even of the enlarged thyroid gland with its numerous thin-walled veins, can be accomplished nowadays with not only the saving of blood, but without the obscuration resulting from the general out-

is held aside by an assistant. When there are so many of such clamps in the wound as to hinder freedom of action the vessels are tied, still held by the clamps, with catgut, when the forceps



FIG. 2.—Esmarch's Forceps.

pouring from small vessels, which in previous times were allowed to check themselves by their own contraction and plugging.

By using a large incision and by keep-

are released, otherwise the ligation of the vessels is postponed until the operation is completed. Some surgeons, as Spencer Wells, will have their ring-handled clamps so constructed as to give at least



FIG. 3.—Hahn's Forceps.

ing the wound free from blood the favorable progress of a difficult operation is much enhanced. To accomplish this, no sooner does a vessel spirt or bleed freely than a hæmostatic forceps is applied to it by the surgeon or his assist-

twenty-five pounds pressure (whence their names force-pressure forceps, with the intention of obviating the use of any subsequent ligature, but in practice the failures to do this more than equal the successes. Hence most opera-

tors, instead of disengaging the clamps to see if the bleeding will continue, will forthwith proceed to apply the catgut ligature to all the points that have been seized as a more speedy and blood-saving procedure. Of the variety of

sliding catches I prefer those of Es-march; but the objection applies to both of them, and also to the narrow or sharp-ended ring-handled ones of Pean and Spencer Wells, that it is not always safe to tie a vessel when caught by such

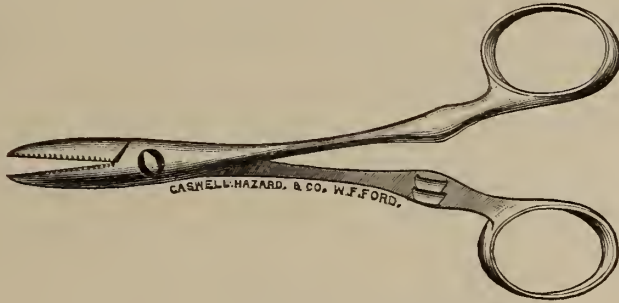


FIG. 4.—Tait's Forceps.

such forceps to be recommended, experience has shown that the several kinds herewith represented are the most serviceable.

They are of two shapes—Figs. 1, 2,

forceps. Where the artery, for example, is near enough to the edge of the wound to allow the point of the forceps to be lifted a little from the cut surface by direct traction, or better still, by tilting



FIG. 5.—Weir's Forceps.

and 3 are patterned after the ordinary forceps, and have strongly marked, serrated teeth and sliding catches to hold the grasp when made. Bilroth's are the lightest, and are usually made of nick-

the forceps strongly to one side, the ligature can readily be applied; but when the vessel caught is deep in a wound, the forceps known as Hahn's or Tait's, Figs. 3 and 4, are the best. Their

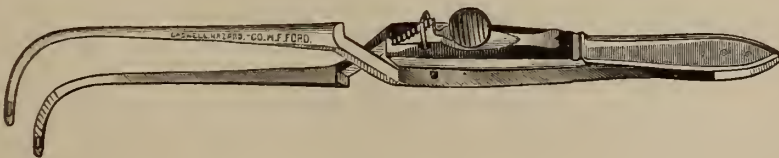


FIG. 6.—Juillard's Forceps.

eled steel, as are all the others save Es-march's, which are of German-silver and therefore a little heavier. They, however, do not so readily tarnish as the others. Of the two forceps with the

rounded ends completely prevent the ligature being caught in the forceps. These are therefore to be recommended for general use. A further point worthy of note in all these forceps is, that all

the slides or catches are readily detached for cleansing; this is separately shown in Fig. 3. In Tait's forceps the blades come apart on wide expansion. In certain cases where the depth of the wound or other reasons forbid the application of the ligature, the forceps can be left *in situ* for several days, covered by the final antiseptic dressing. This expedient is more likely to be resorted to in rectal and uterine operations.

Two other forceps, Figs. 5 and 6, are also presented as particularly serviceable, not as clamps but as facilitating the carrying of ligatures around deep vessels which are to be divided between two ligatures. They are, in fact, an aneurism needle and a forceps combined. I have for several years used one with great satisfaction, not always threading it but more often grasping the double ligature, wriggling the forceps under the vessel, then seizing the ligature, withdrawing the forceps and tying the vessel as desired. Julliard, the distinguished surgeon of Geneva, in his large experience in the removal of bronchoceles, found a somewhat similar instrument, Fig. 6, of great service. It works with an action the reverse of mine. When untouched it remains closed; it can, however, be held open at any point by a graduated ratchet, which is occasionally an advantage.

The Surgical Management of Rachitic Deformities of the Lower Extremities.

Dr. V. P. GIBNEY, contributes an article on this subject to the *New York Medical Journal*. He states a large proportion of the epiphysal changes and bone curves in the lower extremities occur in children. It is a known fact that many cases of exaggerated knock-knee or bow-legs get well without any treatment. Consequently it is desirable

to know what cases can be safely left to nature.

Children under two years of age presenting bow-legs or knock-knees should not, he thinks, be subjected to operation or mechanical treatment unless the deformity is very exaggerated.

Children under three years of age with only a moderate degree of deformity can, in his opinion, be left to nature. In bow-legs, if the curve is confined almost entirely to the lower third of the tibia and fibula, apparatus is more likely indicated. Manual force may be used in patients whose parents are unable to buy apparatus and too improvident to give the necessary attention, or in such cases as allow the surgeon but little time in which to effect a cure. This measure may also be employed in cases where the bones will yield to force, the conditions above mentioned being present.

The author says that osteoclasis, though quite popular with the French surgeons, is an operation which in this country has few advocates. From his experience with osteotomy, he draws the following lessons: (1) Exaggerate the correction of the deformity. (2) Examine the limb at the end of a week to ascertain whether the amount of correction gained is the amount desired. (3) Do not hesitate to refracture by manual force if it is necessary. (4) With strict attention to details in operating and in the use of good plaster-of-Paris bandages well applied, cases can be treated in a dispensary nearly as well as in a hospital. (5) In dispensary cases do all the operating you propose doing at one sitting. The results of Macewen prove that supra-condyloid osteotomy is the operation *par excellence*. —*Louisville Med. News*.

Congenital Sacral Cysts—Description of a Recent Case, with Remarks.

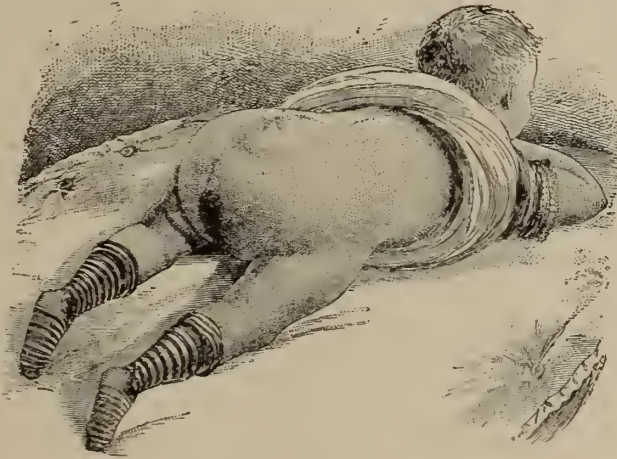
We re-print a portion of an interesting article by Dr. GEO. R. FOWLER, published in *Annals of Surgery*:

M. B., a well-nourished female infant of two months, was brought to my clinic. Upon inspecting the child a symmetrical enlargement in the sacral region and of the buttocks was seen. In the median line the skin had a bluish, thin appearance, and several flattened nodules projected from the surface; otherwise the skin had a natural appearance. A

rectum showed the latter to be crowded forward, and the same distinct fluctuation was here likewise made out. A glance at the accompanying photo-electrotype will give an accurate idea of the appearance of the growth.

During inspiration, and when the child cried, the growth became more tense; during expiration there was a perceptible relaxation of its walls. Position did not seem to influence it in any way, and no reduction in the size of the swelling took place upon pressure.

Aspiration was performed for the purpose of relieving the present symptoms,



prolapsus of the rectum existed, the posterior vaginal wall was crowded forward, and the bladder was pushed upwards to such an extent as to render it difficult at times for the child to micturate.

Upon palpation the mass was found to fluctuate distinctly. The first sacral vertebra was present, but no portion of the vertebral column could be made out below this point. The tumor seemed to spring from and to fill the space normally occupied by the lower sacral vertebrae and coccyx. The cresta ilii could be traced backwards, and towards the median line. Digital examination per

and at this time about an ounce and a half of fluid was withdrawn, or trickled away through the opening made by the needle. This was repeated from time to time as the sac refilled. Unhappily, through a misunderstanding, the fluid with which the cyst was originally filled, and which was withdrawn upon the occasion of the first aspiration, was lost. That removed at subsequent aspirations was found to be clear, limpid and albuminous, and contained traces of chloride of sodium. After each withdrawal of fluid the child seemed much more comfortable, and so continued until it refilled, the prolapsed rectum and

projecting vaginal wall resuming their normal relations upon emptying the cyst. The nodules overlying the growth seemed cartilaginous in character, and were situated between the cyst wall and the integument.

On September 20, the child then being nine months old, I operated as follows : Ether was administered, an incision made commencing at the lower and outer limit of the first sacral vertebra, at the point where the sacro-iliac synchondrosis could be made out ; this was extended downwards, crossing to the other side at about an inch above the anal margin, and carried upwards to a point on the opposite side corresponding to the place of beginning. The semi-elliptical shaped flap thus formed was then dissected up, care being taken to include only the integument. A further examination at this time confirmed my former opinion that no communication existed between the cyst and the cavity of the spinal meninges, and I therefore proceeded to attempt the enucleation of the sac. That portion which projected under the buttocks was readily separated, but there was evidently some adhesion to the pelvic viscera. I therefore opened the cyst, evacuated its contents, and made further exploration with my fingers in its cavity ; there escaped at this time about four ounces of fluid. Examination now revealed the entire absence of the lower sacral vertebræ and coccyx, and, furthermore, it was at once apparent that the anterior cyst wall was adherent to, or, more properly speaking, formed a part of the pelvic peritoneum. It was at once resolved to explore no further in that direction. I therefore rapidly excised the portion of the cyst wall corresponding to the flap, as well as that which lay beneath the glutei muscles, tied all bleeding vessels, irrigated with a warm Koch's solution (mercuric

bichloride, 1-1000), placed two decalcified bone drains in position, brought down the flap, and closed the wound with a continuous cat-gut suture. The dressing consisted of a pad of sublimated and naphthalinated wood flour, held in position by a firm bandage.

The child survived the operation but a few hours, dying from shock, despite every effort. No post-mortem was allowed.

The interest in this case seems, then, to depend upon the fact that there occurred, coincidentally, an absence of the greater part of the sacrum and the entire coccyx, and a cystic growth occupying their place. The plan of treatment followed was the only one from which any hope of permanent benefit could be derived. It has been the universal tendency of operators, however, to join Sir Benjamin Brodie in the opinion that, unless the entire growth in all such and analogous cases can be extirpated, it will be worse than useless to attempt to operate at all. With this view I entirely agree, and this case offers but another example to the list of failures due to the impossibility of definitely determining beforehand the exact attachments of the growth.

Rosinol.

GAUTRELET (*Gaz. hebdomadaire de médecine et de chirurgie*) describes this substance as a yellowish, oily fluid, of a peculiar odor, having the composition $H_{16}C_{35}$. It contains a number of bodies, such as terebene, colophene, cresylic and phenic acids, and creasote : hence its combined tonic, antiseptic, and astringent powers. The writer recommends rosinol as an external application, especially in surgical dressings. He says that it has a specific action in elytritis and endometritis, and remarks that it is very useful in obstetrics. Internally, it is a valuable agent

in the treatment of typhoid fever, cancer and ulcer of the stomach, and, in fact, in all lesions of the gastro-intestinal mucous membrane. By reason of its marked astringent action it is particularly indicated in catarrhal affections of the respiratory tract.—*N. Y. Medical Journal*.

Chlorate of Potassium in the Treatment of Burns.

The *British Medical Journal* contains an article by Dr. J. W. BROWNE, suggesting the use of a lotion of chlorate of potassium (five grains to the ounce) in burns. It is applied on pieces of lint, and these are covered with oilsilk. The dressing should be changed at least four times a day. The writer speaks highly of this mode of treatment.—*Ibid*.

To Cure a Felon.

The following is recommended as a sure cure for a felon: A small plaster as large as the finger nail, spread with the salve used for fly blisters. Keep it on twelve hours, then where the finger is puffed up prick with a *needle* and let out the water. (Never use a pin to open a sore, for often very serious consequences ensue, for brass is very poisonous.) There is nothing painful about the process, but the finger will be very tender. The skin that is separated by the blister keep on just as long as possible, or until it comes off itself. The flesh underneath will be exceedingly sensitive, and will need washing with cream oil or sweet oil.—*Med. Call*.

Suturing of Cut Nerves and Tendons.

Dr. LOEBKER, of Greiswald, reports the following interesting operation: A man was struck on the arm with a porcelain pitcher, and the soft parts on the volar side of arm three inches above the

wrist-joint was cut through. The wound healed, but the man's hand remained paralyzed as well as partially insensible. He was anesthetized, and the scar which had been left from the wound was excised. It was found that the palmaris longus, flexor sublimis digitorum, flexor profundus digitorum, and pollicis longus, with the median and ulnar nerves and ulnar artery, had been severed. Both peripheral and central ends were greatly retracted and grown together in a solid mass of cicatricial tissue. After 2 hours' dissection they were all separated, but it was found impossible to approximate them, so that it was decided to remove a portion of both bones of the forearm. On account of the weak condition of the patient, it was postponed until the following day. The wound was kept open, covered with an antiseptic dressing. A piece of bone, measuring five c. m. was removed from each bone, and the cut tendons and nerves united. At the end of four or five weeks the wound was healed. Massage and electricity soon served to bring about active motion in both hand and fingers, but as the resected bones were still movable, the arm was put up in a fixed apparatus, where it remained for seventeen days; at the end of which time perfect union had taken place. The fingers can now be flexed to a right angle, the interosseous spaces in the hand are filled out again, with the exception of the first. Sensibility is not perfect, but the patient can localize well, with closed eyes, in the region supplied by the ulnar nerve.—*Western Lancet*.

A Simple Expedient in the Management of Strangulated Hernia.

A correspondent who has forgotten to attach his name to his article writes calling attention to a simple expedient that

he has resorted to successfully in cases of strangulated inguinal hernia after taxis had failed. It consists in dilatation of the constriction which produces the strangulation at the internal abdominal ring by passing the finger along the inguinal canal, carrying the integument before it until the constricting ring is felt, which generally is easily done; the finger is then gently insinuated into the opening, and if the band of opposing fibres does not yield readily, gentle pressure is made against the upper border of the ring until it is felt to give way, when a resort to taxis again will ordinarily result successfully.

The advantages to be gained by this expedient are that it can be tried as soon as moderate efforts at taxis prove ineffectual, and before the tissues involved are injured by prolonged or severe manipulation; the patient is saved from the dangers attending resulting from delay; and the dangers attending operative interference, with the complications and sequences which may arise therefrom, are supplanted by a procedure which is harmless in itself and is not liable to be followed by any complication.

Our correspondent finds that there is no danger of creating a larger permanent opening at the internal ring. He has tried it in five cases.

An Excellent Counter-irritant.

Dr. ELLWOOD, writing to *New Eng. Med. Monthly* says: Some years ago I saw the following counter-irritant in one of the medical journals (which one I now forget), and which in certain classes of cases I have found very beneficial: *R. Oleum tiglii, 3 j; ether sulph. 3 ij; tr. iodine 3 v. M. S.*

This excellent counter-irritant is applicable where it is not necessary to

produce too much effect. It is particularly nice for children.

The other prescription is stronger and is intended for cases where the doctor wants a more decided effect: *R. Oleum tiglii, 3 ij; ether fort., 3 vj; tr. iodine, 3 ij; pot. iodide, ʒj; iodine re-sub., grs. x. M. S. counter-irritant fort.*

Micrococci in Relation to Wounds, Abscesses, and Septic Processes.

In a report to the Scientific Grants Committee of the British Medical Association, Dr. W. Watson Cheyne gives the details of some important experiments, the results of which he summarizes as follows:

1. There are various kinds of micrococci found in wounds treated aseptically, differing markedly from each other in their effects on animals. They agree in growing best at the temperature of the body, and in causing acidity and sweaty smell in the fluids in which they grow. The experiments show that cultivations may be carried on in fluids with accuracy, provided the precautions mentioned be observed.

2. The micrococci tested in these experiments grew best in materials exposed to oxygen gas. They grew only with difficulty in the absence of oxygen. Eggs were not good pabulum.

3. Their effect on animals was not altered by growth with or without oxygen.

4. The effects of these micrococci on rabbits and man were not similar, some of the most virulent forms for rabbits causing no deleterious effect in wounds in man.

5. The kidney is apparently an important excreting organ for organisms.

6. Organisms not capable of growing in the blood may yet cause serious effects by growing in the excretory

canals. This may explain some cases of pyelitis.

7. Where an organism is not markedly pathogenic, it may be necessary to introduce a large quantity before morbid changes are set up.

8. Suppuration is not always due to micrococci; it may be caused by chemical irritants, such as croton oil.

9. Micrococci are always present in acute abscesses, and are probably the cause of them.

10. In some cases, the micrococci are the primary cause of the inflammation and suppuration, as in pyæmic abscesses; generally, however, they begin to act after inflammation has been previously induced.

11. This inflammation may be caused by an injury, by the absorption of chemically irritating substances from wounds, by cold, etc.

12. There are several different kinds of micrococci associated with suppuration.

13. Micrococci cause suppuration by the production of a chemically irritating substance, which, if applied to the tissues in a concentrated form, causes necrosis of the tissue, but, if more dilute, causes inflammation and suppuration.

14. The conditions in wounds and abscesses are not the same, inasmuch as in the former there is opportunity for mechanical and chemical irritants to work.

15. There is no reason for denying the existence of antiseptic suppuration.

16. Tension may also cause suppuration, but it is perhaps most frequently aided by the growth of micrococci. These organisms need not be of a very virulent kind. It is also probable that the products of inflammation are themselves irritating and capable of exciting or keeping up inflammation.

17. The micro-organisms of septicæmia, and pyæmia, and of erysipelas, are different from one another and from those of abscesses. In erysipelas, the micrococci grow in the lymphatic spaces. In pyæmia, they grow in the blood to form colonies and emboli. In septicæmia, they may only grow locally, the symptoms being due to the absorption of their ptomaines; or if they grow in the blood they do not form colonies and emboli. Septicæmia may also be due to other organisms besides micrococci.

18. There are no facts to support the view that it is the same micrococcus which, under different conditions, causes these various diseases. The experiments of conversion of innocent into malignant forms, and *vice versa*, are unreliable.—*British Medical Journal*.—*Med. Times*.

VENEREAL DISEASES.

Congenital Phimosis.

Dr. H. G. WETHERILL, in the *Boston Med. and Surg. Jour.*, adds his testimony to show the importance of looking after the condition of the prepuce. He thus writes: A very long prepuce, even free from constriction, I should regard as a malformation and advise its amputation. It interferes with cleanliness and induces sexual orgasm in very young children, attracting attention to the penis at a time when they should know it simply as a urinary appendage, without other function, and is doubtless instrumental in making onanists.

Echeverria, in his famous work on epilepsy, says: "Congenital phimosis, in the case of males, renders them specially prone to onanism. This malformation is not necessarily incompati-

ble with health, though it may become a frequent source of troublesome local and general derangement."

Althaus, in an article in *The Lancet* of February 16, 1867, upon "The relation of phimosis to epilepsy," speaks of meeting with the malformation in eleven out of twenty-five consecutive male cases of epilepsy admitted at the London Infirmary for Epileptics and Paralytics (nearly 40 per cent.).

Echeverria did not find so great a proportion, and in my own investigations among the epileptics in the New Jersey State Lunatic Asylum a smaller proportion was also found (36.5 per cent.).

Thirty-three male epileptics are at present (July 3,) in the institution, and out of that number twelve were found to have phimosis and ten elongated foreskins to an extent which might be mischievous. Twenty-one of these men are known to be, or admit having been, habitual onanists, and the actual number addicted to the habit is probably much larger.

It would not be proper to infer that this habit has, in all these cases, arisen from the malformation, for no doubt in some cases the elongation may have been induced by long continuance of the practice, and in the same way we know it to be true that the practice is often a result of mental disturbance and consequent abandon. Still in many of these cases we know that the phimosis is congenital and responsible wholly, or in part, for the vice.

As to the potency of masturbation in the induction of mental derangement and causation of epilepsy, we have many celebrated authorities who set forth in their strongest possible words the great influence they believe it to have in causing them. Marshall Hall, Brown-Séquard, Van der Kolk, Echeverria,

Maudsley, and Sheppard, agree that "epileptic attacks, like every reflex or direct action of the spinal system, are always excited;" "epileptiform convulsions may be constant consequences of slight irritations upon certain nerves," and that especially a continued spinal irritation (like that present in the class of cases we are considering) likely to be followed by the kinds of disease now common in our overcrowded asylums and homes for the feeble minded.

There is a peculiar form of melancholia common in asylums, and recognized and described by nearly all authorities upon psychology, which has its origin in a long-continued habit of masturbating. In looking into the matter as bearing upon this question of phimosis, I find the greater number of such cases with which I have met have either a complete phimosis, or such a long prepuce, as in my judgment may have interfered in early youth with cleanliness, physical and moral.

The solitary vice soon leads to a desire to be left alone at all times; the victim becomes depressed, and, as Van der Kolk says: "In a word, the depressed tone of mind here passes over into religious melancholia; all afflictions have a religious color." "This peculiarity I have so often and constantly noticed that I venture to express my conviction that we should rarely err if in a case of religious melancholy we assumed the sexual apparatus to be implicated, either through onanism or through other causes."

In examining the works of many of the best authors of the later days, I find more or less a common expression of opinion in relation to this matter, which my own experience verifies, as it is in general about this: That many forms of mental derangement from mania to dementia may be caused by habitual

onanism, and that a large proportion of the epileptic and melancholic cases we find in our asylums are the results of some sexual irregularities.

That phimosis (or great elongation of the prepuce even) induces a desire to onanize, I regard as proven and axiomatic; so we can easily trace many of these various maladies to a very easily avoided cause.

Congenital Hypospadias.

At the meeting of the New York Surgical Society, March 24, 1885, Dr. POST presented a patient on whom he had performed an operation for hypospadias on February 3. The man was over 30 years of age. The floor of the urethra was deficient to the extent of about 2 ctm. behind the corona glandis. The operation consisted in making a perineal incision into the membranous part of the urethra, introducing a short catheter into the bladder, dissecting a flap of integument 2 ctm. wide on the lower surface of the penis, extending back nearly to the scrotum, and denuding a space 1 ctm. wide on each side of the flap and extending forward on the lower surface of the glans. The flap was then doubled on itself and drawn forward as far as the glans, and its edges were attached by fine sutures to the outer edges of the denuded space. The deep layer of the doubled flap, which was designed to form the floor of the urethra, was not attached by sutures, but left to attach itself. The wound was washed with a solution of mercuric bichloride, 1 to 1,000, and dusted with iodoform. To take off the tension from the base of the transplanted leaf, a V-incision was made behind the base of the flap, the triangular flaps of skin were dissected up from its base, and the sides of the triangle drawn

together with sutures, converting the V into a Y. The wound healed perfectly, and the floor of the urethra was thus extended beyond the corona glandis. The catheter was withdrawn from the perineal wound within a fortnight after its introduction, and the patient passed his urine freely through the reconstructed canal. Within a very few days the wound of the perineum was entirely healed.—*Weekly Med. Review.*

Prophylaxis of Gonorrhœa.

Dr. LANGLEBERT, speaking of the prophylaxis of gonorrhœa, etc., he strongly recommended the routine use of the following wash: R. Alcohol, 30 grammes, Sapo mollis, 10 grammes. Dissolve the soap in the alcohol, filter, and add essence of citron rectified, 5 grammes.—*Med. Times.*

Gonorrhœal Rheumatism.

M. TERRILLON, lecturing at La Charité, observed that by a curious chance he had two patients in his wards suffering in a very similar manner from this somewhat rare affection. They were both young men who had been for a few weeks the subjects of subacute gonorrhœa, when they were seized with severe inguinal pain with fever and *embarras gastrique*, one of the patients feeling considerable pain and tenderness on pressure in the vicinity of the hip joint, while in both the movements of the joint were somewhat impeded, and in both there was a deep seated doughy resistance in the inguinal region. The conclusion arrived at was that the bursa situated beneath the psoas was the seat of pain, but this continued for some time rather obscure. This rheumatic affection is not merely a coincidence of the gonorrhœa, but a form of rheumatism which develops itself without any

other cause whatever than the gonorrhœa. It is indeed not rare to meet with patients who, having been cured of a first attack of rheumatism occurring under these circumstances do not suffer from subsequent attacks unless they contract a second blenorrhagia. This form of rheumatism has its peculiarities, for it attacks females very seldom, and nearly confines its attacks to the large joints—the hip, knee, and elbow; the smaller joints only suffering secondarily. Moreover, it is generally mono-articular. Sometimes it is attended with effusion into the joints, while at others it gives rise to ankylosis in even ten or fifteen days, the rapid formation of fibrous adhesions rendering this incurable. This rheumatism may, however, affect other parts than the joints. Thus (1), what seems to be an articular affection may really be one affecting the neighboring tendinous sheaths, a tendinous synovitis with swelling and effusion. (2) It may invade the muscular system, the muscles of the neck, the deltoid, or even the motor muscles of the eye being affected. (3) It may manifest itself in the serous bursæ, near the joints, as the hip, patella, or elbow. (4) It may attack the sciatic nerve, and this is not very rare. (5) M. Guyon first pointed out a doughy state of the cellular tissue that may occur, accompanied by pain and heat. (6) Many examples exist of its attacking various tissues at once in the same region. Gonorrhœal rheumatism, moreover, is peculiar in not giving rise to any visceral phenomena, so that affections of the chest do not result from it. It is also fugaceous and does not reappear, except after a new gonorrhœa. The relation between it and the discharge is somewhat curious, for in some patients who had had abundant discharge, this diminishes as soon as the rheumatism is

manifested; but this is not constantly the case. As to its prognosis, the disease may be said to be of but slight importance when it attacks only the tendinous sheaths, the bursæ, and the muscles; but this is far from being the case when a joint is invaded, for so liable is it for ankylosis to take place, that our first object should be to place the limb in the most favorable position in case this should occur. Even when ankylosis does not occur, stiffness of the joint is one of the most common sequences, and this, accompanied as it often is by muscular atrophy, is long in disappearing. In these cases we must allow the joint to gradually resume its movements and not endeavor to force this by violent measures, under pain of finding the fibrous tracks increase in number and thickness. This state of atrophy and stiffness is much benefitted by electrical currents, by *massage*, by sulphurous douches, and by a course of mineral waters at Aix. The treatment of gonorrhœal rheumatism is not the same as that of ordinary rheumatism in which salicylic acid is the most heroic remedy. Here it is of no avail, and we have to content ourselves with revulsives, chiefly blisters, repeated as many as three times at intervals of two or three days. When the effusion is abundant we should not hesitate to puncture the joint, which is an excellent proceeding, relieving it at once of a mass of liquid which would require at least two or three weeks for its absorption. After the puncture effectual compression should be applied. Finally, the disease leading to a considerable depression of strength in the course of a few days, its subject should be carefully “tonified” and the tonic *par excellence* in such a case is the sulphate of quinine.—*Gazette des Hôpitaux*.—*Md. Med. Journal*.

DISEASES OF THE EYE AND EAR.

Transplantation of Skin-Flaps without Pedicle.

At a recent meeting of the Academy of Medicine, in Ireland, Mr. SWANZY read a paper on transplantation of skin-flaps without pedicle, for the cure of cicatricial ectropion. He reviewed the steps of the proceeding as usually practised, and gave particulars of six operations he had recently performed, four of them successful, and two unsuccessful. The successful cases were exhibited. In addition to the points generally regarded as important, he drew attention to the following:

1. It was desirable that the wounded surface on the eyelid should be made as extensive as possible, by the dissection of the everted lid being carried to the fullest extent. It was not sufficient, as usually recommended, to carry the dissection only so far as to bring the free margin of the eyelid being operated on into contact with the free margin of its fellow; but the dissection of the lid from the surface underneath to which it was attached should be gone on with until, on reflection, the free margin reached up to beyond the eyebrow, if it were the lower lid, or as far as or below the infra-orbital margin, if it were the upper lid. The object of this was to provide for the inevitable shrinking which took place in the transplanted flap, so that the ultimate size of the eyelid might not be less, or much less than normal. This point had not before been mentioned.

2. With regard to securing the flap in its new position by sutures, it would be much better if sutures could be avoided, as they caused suppuration at each point. The author had no

experience of methods of securing the flap without sutures. If sutures were used, they should be of fine silk or of fine platinum wire, and only so many as sufficed to keep the flap in its place. Catgut sutures were not suitable, as they did not hold long enough to enable the flap to become adherent. A large number of sutures were unnecessary, and caused a line of suppuration around the margin of the flap; but platinum wire seemed to cause little suppuration.

3. With regard to the dressing, carbolic acid should not be used in any form, being apt to irritate the delicate skin-flap, and increase the liability to peeling off the epidermis. He did not agree with Wolfe, that the so called antisepticism "has no place in ophthalmic surgery." In this proceeding, the dressings should be antiseptic, but they should be also non-irritating. Boracic acid and sero-sublimate were among the suitable applications. Finally he pointed out that where the epidermis had not peeled off the shrinking was slight in comparison with where it came away and where the rete Malpighii had to throw out a new cuticle.

Salicylate of Eserine in Phlyctenular Keratitis.

The following formula the author finds to yield very satisfactory results in the treatment of inflammation of the cornea of children: $\mathcal{R}$ Salicylate eserine, grs. ij, aqua, $\mathfrak{z}$ ss. M. Sig.—One or two drops once a day; drop into the eye.—*Med. Bulletin.*

DISEASES OF THE SKIN.

Salicylic Acid in Urticaria.

LASSAR (*Monatshefte f. Prakt. Dermatologie*), gives the case of an other-

wise healthy man, who for six years had been subject to sudden and severe attacks of urticaria, accompanied by feverishness and general malaise and without ostensible cause. The eruption was severe and general, even the mucous membranes being attacked.

Salicylate of sodium, in twenty-four grain powders, was ordered, to be taken the moment the symptoms appeared, and repeated at intervals of two hours until two more doses had been taken. Under this treatment the attacks were not only cut short, but reduced in frequency, none having occurred for two months at the time of the report.—*Med. Times.*

The Treatment of Acne Rosacea.

Dr. TOM. ROBINSON thus writes in the *Brit. Med. Jour.*, January 17, 1885.

That alcohol does produce in some skins all the degrees of acne rosacea is undoubtedly true; but, to associate all cases of the disease with excessive drinking is unscientific and unfair. I know very many most rigidly careful people afflicted with the malady; and the unpopular name for these red spots being "grog blossoms," in no way diminishes their suffering.

The treatment may be summed up in a few sentences. It is essential that all those who are afflicted with acne rosacea should abstain from all food which is difficult to digest, such as pork, veal, hashes, stews, and uncooked vegetables; and, as a general rule, from wine, beer, and spirits. The face should not be irritated by common soap, and care should be exercised as regards exposure to the wind and sun. The meals should be slowly eaten at regular hours, and the fluid put into the stomach at the end of the meal.

In the first degree of the disease it

will only be necessary to prevent the development of the papules, by applying a lotion, made with bismuth and the glycerine of starch of the *Pharmacopæia*, diminishing the starch by three-fourths.

When the papules are developed, nothing answers so well as a lotion made with two grains of the bisulphuret of mercury in one ounce of almond-emulsion of glycerine of starch, used every night.

When the inflammation is acute, and suppuration is going on, we must, in the first instance, foment the face with hot water (placing a hot sponge over any troublesome spot, is a simple and useful plan); and, when the acuteness of the inflammation has subsided, rub in an ointment made with twenty grains of the yellow oxide of mercury in one ounce of lard, and continue this treatment until the inflammatory process has stopped; after which, the bismuth and starch lotion answers well.

Internally, I always rely upon a mixture made with an alkaline carbonate; soda, I think, is best. If there be much inflammatory thickening, I add the solution of perchloride of mercury, or if there be any syphilitic tendency to grapple with, I add the Donovan's solution; if scrofula, cod-liver oil; but internal and external remedies are useless where organization of tissue has taken place. I have never seen an operation performed upon the advanced cases of acne rosacea.—*Med. & Surg. Reporter.*

Eczema.

R̄. Ol. lini, aq. calcis, āā, ʒ ii. M.
Sig.—Apply locally.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Fracture of the Lower End of the Radius.

Dr. R. J. LEVIS, (*Med. News*): The correct nature and mechanism of the ordinary form of fracture of the lower end of the radius is now, after much controversy, generally admitted and properly comprehended. With this proper understanding the indications of treatment become rational and decisive. In the usual and very characteristic fracture of the carpal end of the radius the primary line of the fracture is, with little tendency to deviation, *transverse* in direction. Associated lines of fracture are generally those of comminution of the lower fragment, and are caused by the upper fragment being driven vertically into it and splitting it, usually in directions toward its articular surface. The displacement of the lower fragment is toward the dorsal aspect of the forearm, and its articular surface is inclined in the same direction, abnormally presenting backwards and upwards.

The mechanism of the fracture is its production by falls upon the palm of the hand, which, with the carpus, undergoes extreme extension, and the fracture is caused by an *act of leverage* or *transverse strain*. This direction of force has also been called *cross-breaking strain*. In this fracture, actual displacement of the lower fragment may not exist at all, or it may be to the extent of complete separation from contact with the broken surface, varying with the amount of force applied and with the retaining influence of the surrounding dense structures.

The first essential of the treatment of fractures of the lower end of the radius is *the complete reduction of the displacement*. The action of replacement must be directed to the lower fragment itself.

The reduction of the fracture can usually be thoroughly effected, under anæsthesia, by *strong extension applied to the hand, associated with forced flexion of the wrist, and with pressure applied directly on the dorsal surface of the lower fragment*. Unless vertical splitting or comminution of the lower fragment exists, the maintaining of partial flexion of the wrist, with pressure of a pad on the dorsal surface of the fragment, will prevent return of deformity. With the



object of retaining the apposition of the fractured surfaces, by overcoming displacing forces, I have practiced for many years on the principles involved in the splint here illustrated, the application of which will not require much description. In the treatment of fracture of the lower end of the radius it is essential that proper allowance be made for the curvature of the anterior or palmar surface of this part of the bone. This is insured in the splint which I have devised, which follows correctly the radial curvature; and the fixing of

the thenar and hypothenar eminences of the hand in their moulded beds, maintains the splint immovably in its correct position with reference to the radial curve. To neglect of complete primary reduction of the displacement of the lower fragment, and to inefficient restoration and retention of the normal radial curve, are due the frequent unfortunate sequences of this fracture.

The splint is made of copper, so as to be readily conformable by bending to suit the peculiarities of size and form of forearms. The slight roughness left on back of splint from perforations is for the purpose of keeping the bandage from slipping. It is nickel-plated to prevent oxidation. The splint will usually fit the forearm so accurately that but little padding will be required, and a piece of woven lint, or of cotton or woollen flannel is all that is necessary for its lining. No dorsal splint is needed, but, as before referred to, a small pad will, in most cases, be required over the dorsal surface of the lower fragment. For retention of the splint an ordinary bandage, two inches and a half to three inches wide, is all that is necessary. This splint has the merits of being applicable to all cases of fracture of the lower end of the radius, and also to many other injuries involving the forearm and wrist, and, as now supplied, is very inexpensive. It is manufactured by J. Ellwood Lee, Conshohocken, Pa.

Hip-Joint Dislocation—Successful Reduction after twelve weeks.

Drs. J. H. and L. T. HALL. (*St. Louis Cour. of Medicine*): Little Sadie P., aged 9 years, was brought to our office early in October, with the following history:

On July 17 preceding, while playing with other children in the orchard near the house, she had fallen from an apple tree. After some hours' delay a physi-

cian was secured who readily diagnosed the case as one of dislocation of the hip-joint, and proceeded, under chloroform, to reduce the dislocation. According to statements of those present the operation was successfully performed without serious difficulty. Accepting this information as correct, the luxation must have recurred spontaneously almost at once, as from the positive statements of parents and others the present deformity has existed from that time. The dislocation was the usual one, upon the dorsum of the ilium, producing the marked deformity of that injury. More than eleven weeks had already elapsed since the accident, but the parents being quite anxious that something should be done, an early day was appointed on which to visit the house, twenty miles distant, and undertake the operation. Accordingly, on Wednesday October 8, 1884, with many misgivings as to the result, we repaired to the house, and early the following morning proceeded with the operation.

Without entering into details, the patient was thoroughly etherized and by patient and persistent effort the head of the femur was finally safely landed in the acetabulum. Save the use of pulleys and other mechanical appliances, the usual methods of the operation, extension, flexion, rotation etc., were in turn resorted to.

The after treatment consisted in the use of extension, applied as in morbus coxarius, the patient being confined to the bed for three weeks.

On last Monday, more than four weeks after the operation, the little girl was found going about the house, using crutches as a precaution, but having quite free use of the limb, admitting of flexion to a right angle and taking the weight of the body readily, only a slight halt being observed in the gait.

The books, so far as I have examined, give seventy-six days as the limit in practice of successful reduction of this dislocation. This operation was eighty-four days after the injury and suggests that advisability of an attempt at the operation at almost any time, at least within that limit.

An Auxiliary Method for the Reduction of Dislocations.

The following is a portion of an article by Dr. ASTHALTER, published in *Med. and Surg. Reporter*:

It is well known how completely a swelling dependent on obstruction to the return of the venous blood will disappear upon the application of pressure.

Anæmia, generally speaking, conveys the idea of insufficiency of blood, a lack of quantity, or better, a defect in quality. But the anæmia artificially produced in an extremity with the elastic bandage is entirely different. Here we have not only an entire absence of blood, but of all lymph and residual fluid that may be in the tissues (bone tissue is here excluded).

When the blood and serum retreat before the applied bandage, the result must be that the walls of the capillary spaces will enclose upon each other. This enclosure of the walls of the capillaries, as well as the capillary spaces in the tissue, will cause a shrinkage of all the tissue brought under the influence of the pressure. That this shrinkage actually takes place (as it can theoretically be expected) I have proven to the satisfaction of myself, by actual measurements made of the circumference of an extremity, before and after the application of the bandage. Why we do not see any wrinkles of the skin I can only explain from the fact that the skin is elastic and can lessen its dimensions or shrink without wrink-

ling, and again, on the ground that the adipose tissue, where it is present in heavy layers, will be sufficient support to hold the skin smoothly. That shrinkage takes place is beyond all doubt; the question arises with us, of what value is this shrinkage in luxations. It is plain that if pressure will lessen the size of all the tissues brought under its influence, then not only swelling that may be present will partially or entirely disappear after applying pressure, but also the natural size of the tissue will be reduced. It follows then that the general swelling of the tissue, which will be reduced in size, will shrink and make the way for the returning head of the dislocated bone more spacious and easy to traverse. Nearly all local swelling of an acute nature is the result of pressure, whether the capillary vessels are enlarged by temporary paralysis of the vaso-moto nerves, or whether the capillary spaces are filled up and distended by migrating cells. The pressure may also be of the purely mechanical kind, as for instance in paraphymosis.

Any method which consists in the application of an Esmarch or India-rubber bandage in the same way as Esmarch has recommended for amputation and sequestrotomy, has for its object first, to reduce swelling (cause shrinkage); second, to create partial or complete anæsthesia; third, to throw the muscles out of action.

To gain this object the bandage must be tightly adjusted, and its central or upper end must be brought to bear on the origin of those muscles that may pass to or beyond the dislocated joint. The method can be applied only to those joints peripheric from the shoulder and hip-joint. No physician need have any fear whatever to apply the elastic or rubber bandage as tightly as it lies in his power.

Those cases reported from Langensbeck's clinic and elsewhere, where damage was done especially to the nerves, were due to the use of the flat tube as originally applied by the inventor. This tubing has been discarded in Germany, and the rubber bandage adopted in its stead. The indications for the use of the elastic bandage are :

First. In those cases where a diagnosis is not possible owing to the swelling. The swelling resulting from dislocation is usually very painful, and an anæsthetic should always be used.

Second. Where, after repeated attempts with or without an anæsthetic, the reduction was not successful. In such cases we may assume that the capsule or the edges of the rent may be swollen ; a bundle of fibrous or other tissue may have lodged itself between the articulating surfaces ; therefore, the even pressure of the elastic bandage tends to make the parts lax and cause shrinkage. It seems to me the results with this method will be particularly gratifying when applied to the luxations of the smaller joint. (It is estimated by the different authors that from one-third to one-half of the dorsal luxations of the thumb are irreducible.)

Should a case of this nature be brought before us, and after having used mild manipulation and force without success, then the question arises, What shall we do ? We can perform an operation, having for its object the severing of the tendons and other obstructing tissue, or the excision of the joint. This operation requires skill, and like all operations, is not without danger, and the result is by no means perfect in all cases. Otherwise, the patient will be left to his fate ; that is, to leave the thumb in its dislocated position. Our inability to reduce the

dislocation will deprive the patient of the use of one-half of his hand.

We see this method is limited to certain joints and certain conditions. That the method is painful we will admit ; but the time to resort to it is when the manipulations that are practiced by the expert surgeons have failed to reduce the luxation.

Aside from the object of this method, we think it ought to be applied in those cases indicated above, for the following reasons :

First. There is only ordinary skill necessary for its application.

Second. It can be applied in from five to fifteen minutes.

Third. It leaves *no injury behind*.

Fourth. We will by this method, in nearly all cases, save the patient the pain and risk connected with an operation that is, at its best, doubtful in its results.

To satisfy myself as to the value and practicability of the application of pressure in cases of luxations, I made a series of experiments on the elbow-joint of the rabbit. For several reasons this joint is the only one that can be used for this experiment. But even here we have such a strong capsular ligament and a long, upwardly curved olecranon, and very high processus coronoideus, to contend with, that sometimes a fracture was much easier to produce than a luxation. I accordingly severed subcutaneously the anterior part of the capsular ligament, and in this way was able to produce a posterior luxation of the ulna. Although a luxation brought on in this way can in no wise be compared with those brought about by accident, yet my results (with the aid of the bandage) were so favorable that I feel justified in publishing and recommending this method.

As already stated, we admit that this

method is painful ; yet if the indications above set forth are strictly adhered to, the question of pain cannot be taken into consideration.

In conclusion I must say that should success not attend the first application of the bandage, then another similar application must be made. The central bandage must remain in its position while the peripheral one is being re-adjusted. Now after the adjustment of the peripheric bandage, the central one must be removed and re-applied as before.

Surgical Apparatus for Removing Fixed Dressings.

Dr. WILLIAM BARTON HOPKINS exhibited an apparatus designed to facilitate the removal of fixed dressings.

It consists, as shown in the accompanying cut, of a vertebrated chain constructed of brass, and so formed that when it is placed upon a part prior to the application of a fixed dressing, it



will, on withdrawal as soon as the dressing has set, leave behind it in the latter a hollow longitudinal ridge. This may be readily divided by a few strokes of a rasp at any time it is desired to remove the dressing, and, a clean, straight cut being thus made, the splint will be in

suitable condition to re-apply, if necessary. As applied to the part, the chain presents the form of an inverted T, and although the upright portion stands half an inch high, it increases the circumference of the limb only one-eighth of an inch, and does not affect the proper tension of the dressing.

When a hinge in the splint is required, two chains are applied,—the ridge formed by the one in front being cut, while that behind makes a joint. If the chain has to travel over a very convex curve, it should be wrapped in wax-paper, in order to bridge over the spaces between the widely separated spines.—*Med. & Surg. Reporter.*

Anthrax and its Treatment.

Dr. VINKE concludes an article in the *St. Louis Med. and Surg. Journal*, as follows :

This brings me to the object of this paper ; the consideration of the treatment of carbuncles by iodoform topically applied. I saw this method of treatment suggested several months ago in a German medical journal, and have since had occasion to try it in two aggravated cases. There are several reasons why this remedy recommends itself in these cases :

1. Because it is a powerful antiseptic.
2. On account of its anodyne action.
3. On account of the property it possesses of stimulating granulations and hastening repair.

For theoretical reasons, therefore, this drug is indicated, and its usefulness, as far as my experience goes, is borne out in practice. After trying a great variety of different dressings, as solutions of salicylic acid, carbolic acid, etc., this has proven the most soothing and pleasant to the patient. It should be employed in the following manner :

The entire inflamed surface and ulcer should be covered with a heavy layer of iodoform, also absorbent cotton and rubber paper may be applied over this, and the entire secured by bandage. This dressing should remain undisturbed for several days, or till the accumulation of pus necessitates a change. Objections on account of its penetrating and offensive odor, might be urged against the use of this drug; this, however, can almost be completely corrected by the addition of 20 to 30 drops of eucalyptol to $\frac{3}{4}$ i. of iodoform.

Attention of late has been called to the toxic action of iodoform. It is claimed that such symptoms as the following may ensue upon the use of the same :

1. Elevation of temperature. 2. Depression of spirits, headache, disorders of the digestive tract, etc. 3. Alarming increase in the pulse rate. 4. Collapse, ending in death.

Besides these, general symptoms resembling those of cerebral meningitis have been observed. (Shede of Hamburg, *Centrallblatt f. Chirurgie*, 1882, and Kuester, Berlin, *Clin. Wochenschrift*, 1882). It has been suggested that these symptoms, which are so rarely met with, are to be ascribed to a peculiar idiosyncrasy towards iodoform (Schede), or what is perhaps more probable, upon diseased conditions of the excretory organs, especially the kidneys; (*Brit. Med. Journal*, 1882.) Dr. J. H. Mundy, of Vienna, in the *Berlin Klin. Woch.*, states that the cases of iodoform intoxication were the result of putting too much of it in the wound, as for instance the enormous amount of $\frac{3}{4}$ iiss. to $\frac{3}{4}$ x. at one time, in patients who were anemic, or either very old or very young, and that in most of the fatal cases reported by Miculicz, Koenig, Hoeftman and others, a post-mortem

examination revealed organic lesions, which might have been the cause of death (*London Medical Record*, 1882.) Although I have used iodoform in large quantities in dressing small and large wounds, I have never met with a single case of poisoning.

Goitre.

(*Bull. de l'Acad. Roy. de Med. de Belgique*). Dr. BAUWENS of Alost. His conclusions are :

1. Goitre may be sporadic, a local disease without diathetic cause; *e. g.* accouchement, mechanical causes.
2. It may depend on a blood change; *e. g.* scrofula.
3. Is a constituent part of the triad of signs of exophthalmic goitre.
4. It is endemic.
5. It may be everywhere, epidemic.

Iodine internally cures the endemic non-degenerated goitre and is often successful in the soft recent goitres of the scrofulous. It is in other forms useless; ergotine, internally, is more generally useful.

The indications for the parenchymatous injection of iodine and ergotine, are as follows :

<i>Tincture Iodine.</i>	<i>Ergotine (D'Yvon.)</i>
a. Cystic goitre, cure.	Idem.
b. Soft, diffuse, recent cure sometimes.	Success certain.
c. Vascular-sanguineous, dangerous and useless.	Its physiological action guarantees success.
d. Exophthalmic; dangerous.	May succeed.
e. Degenerated, injurious.	May succeed.
f. Fibrous—useless.	May succeed.
g. Retro sternal; dangerous.	If parenchymatous, should be tried.
h. Cancerous—useless.	Useless.

In class *f* surely the author is mistaken. I have treated and seen treated many fibrous goitres with interstitial injections of iodine in greater or less strength, seldom without benefit and often with a practical cure.—*St. Louis Med. and Surg. Journal*.

Atropia as a Remedy in Ether-Narcosis.

Dr. R. W. AMIDON, in an interesting article published recently in the *Medical Record*, from a series of experiments, produces the following table, showing the value of atropia in ether-narcosis :

Symptoms referable to the	Ether-narcosis and asphyxia.	Poisoning by atropine.
Skin.	Bluish or ashen palor ; cool and moist.	Suffused perhaps ; scarlet ; hot and dry.
Mouth and throat.	Moist or full of mucus.	Very dry.
Intestines.	Relaxed ; perhaps involuntary evacuations.	Increased tonicity and peristalsis.
Urine.	Normal amount ; perhaps involuntary evacuation.	Diminished in amount ; retained.
Arterial tension.	Lowered.	Elevated.
Pulse.	Not very fast ; weak.	Very fast ; strong.
Temperature.	Subnormal.	Slightly febrile.
Respiration.	Slow and shallow ; perhaps stertorous.	Rapid and deep.
Pupil.	Perhaps (?) contracted.	Dilated to a maximum.
Motility.	General relaxation.	Restlessness.
Reflexes.	Abolished.	Normal or heightened.
Sensibility.	Abolished.	Normal or heightened.
Consciousness.	Lost ; a condition of profound coma.	Insomnia ; excitement or even wild delirium.

Adherent Ulcers.

JAMES HARDIE, M. D., Edinburgh, in speaking of the condition usually described as "indolent ulcer," intimates that the exact pathological condition is much better implied, and hence the correct treatment better suggested by the term adherent ulcer. In all such ulcers there had previously been an inflammatory process ; as a result the loose cellular tissue on which the wound was situated became infiltrated with plastic lymph, extending to a greater or less depth ; even in some cases down to the superficial fascia, or in case of destruction of the latter, the parts may become infiltrated as deep as the muscular aponeurosis. In process of time this plastic material undergoes the changes usually incidental to it ; it becomes less soft, more organized, dries up, and, in short,

is converted into dense cicatricial tissue, almost as dense as cartilage and almost as destitute of vessels. Thus the ulcer becomes incorporated with and adherent to the subjacent fascia, and thus its base becomes converted into a tissue, with no adaptability for carrying on the processes essential to healing. All such ulcers have a strong tendency to present, in process of time, the characters of "indolence," more especially as regards the appearance of their surface. These ulcers may vary in external appearance, owing to their location, but in all, the underlying condition is the same ; there is hard, dense, unyielding, poorly nourished tissue, which has become, through organization of the exuded plastic material, adherent to the deeper parts. Such ulcers, of course, have no spontaneous tendency to heal, a condition of affairs which is more es-

pecially maintained by the adhesion to deeper parts.

He says of the treatment: Having regard to the fact that the ulcer is intimately attached to an unyielding fibrous structure, which is itself also infiltrated with inflammatory deposit, and bearing in mind also that there is a sense of resilience in this structure when it is firmly pressed, I infer that beneath this indurated base the tissues are not thus infiltrated, but are probably in their normal condition. If, then, I expose this normal tissue, I may reasonably expect that it will follow the course which an open wound in normal tissue generally follows—that is, it will produce granulation, which is the condition we are so desirous of seeing take place in the ulcer. It is very easy to accomplish this. No serious operation is required, such as excising the whole ulcer, or even its edges. All that I am going to do is to make a crucial incision right across the ulcer, from soft skin on one side to soft skin on the other. I must take care to go deep enough—deep enough, that is, to divide completely the infiltrated tissue, and expose the normal tissue beneath. The immediate effect of this will be that the elasticity of the cicatricial tissue will cause the edges of the incision to spring apart, leaving four gaping wounds in the base of the ulcer, with four gristly tongue-like processes projecting from its sides. A few days after an operation such as this, I confess that a somewhat alarming appearance generally presents itself to view; and I have known house surgeons, who have seen it done for the first time, quietly have their own thoughts about the affair. But the more alarming it looks, the better. What happens is this. The soft tissue at the bottom incisions pushes up its granulations. The old cicatricial processes retract more and

more. The edges of the ulcer retreat. Bright, vigorous granulations fill up the gap, and at the end of a week the ulcer is twice the size it originally was. Then the alarming period comes to an end. Soon you find a healthy sore established and healing goes on apace. Nothing can be more satisfactory than the extraordinary rapidity with which healing is accomplished under these circumstances. I suppose that the healthy granulations, pressing on the old cicatricial tissue, insinuate themselves into it, and cause it to become absorbed, for in a short time it is indistinguishable. You thus establish a healing sore in place of an indolent ulcer. I need not say that healing sores do not always go on to heal uninterruptedly. If they are large they probably will not. But do not forget how much you can do by the process of skin-grafting. It would be perfectly futile to attempt to graft this ulcer in its present condition. To succeed in that operation you must have a healthy bed for your grafts. Do not waste your time nor annoy your patient by attempting it on an ulcer which is indolent, or callous, or weak, or inflamed; but get it somehow into a healthy condition, and then seize your opportunity. In this manner many an ulcer which had been for years a trouble to its possessor may be expeditiously and soundly healed.

A word as to the method of operating. You must make as many incisions as are necessary to liberate the parts perfectly, and you should place them where the ulcer seems to be hardest or most adherent. Above all, you must carry the knife completely through the hardened tissue. This cuts like a raw potato, and when you have first of all made a clean deep cut, it is well then to continue scratching the bottom of the latter with the point of your scalpel. You will

know, the first time you do it, from the abrupt cessation of the peculiar harsh sensation, when you have reached the soft tissue underneath. Occasionally you will have to go pretty deep—say three-quarters of an inch—more frequently less than this. Occasionally also you will cut a large vein. That you had better tie, for its mouth remains widely open.—*West. Med. Reporter.*

The Treatment of Carbuncle without Incision.

Dr. L. DUNCAN BULKLEY, of New York, read a paper on this subject at the late meeting of the American Medical Association. To our personal knowledge a beginning carbuncle often heals kindly after thrusting a knitting-needle heated to a white heat into the centre of it. Thus the necrotic tissue is at once entirely seared and destroyed, and elimination by reactive and spreading inflammation obviated.

He related the case of a gentleman, aged fifty-six, large and florid, who suffered for several years with eczema of the left foot. He was also diabetic. Following upon this eruption was a large carbuncle. He applied to this tumor, thickly spread on the woolen side of lint, the following ointment: $\mathcal{R}$. Ergot. fl. ext., $\mathfrak{z}$ ij.; zinci oxidi, 3 ss.; unguent. aq. rosæ, $\mathfrak{z}$ ij. M.

Covering this was a cotton batting, to prevent blows or injury. He was given sulphite of calcium, $\frac{1}{4}$ gr. every two hours, and occasionally the following: $\mathcal{R}$. Magnesiae sulphat., 3 iv.; ferri sulphat., 3 j.; acid. sulphurici dil., 3 iij.; syr. zingiber, $\mathfrak{z}$ j.; aquæ ad., $\mathfrak{z}$ iij. M. S.—Teaspoonful in water through a tube three times daily.

At bedtime Dover's powder was administered to give rest when required. The result of the treatment was cessation of pain, rapid resolution, and a

cure, except some induration, in eighteen days. The man continued at his work.

He summed up his paper as follows:

1. Avoid any irritation, as pressure, blows, etc.

2. Avoid warmth and moisture, as in poultices.

3. Avoid incision.

4. Do not use stimulants.

5. Protect the inflamed parts with the ointment given above. The solid extract of ergot may be used if desired. Spread the ointment at least one-third inch thick.

6. Use sulphite of calcium every two hours for its effect upon suppuration.

7. Employ good, nutritious food, and fresh air.

8. A sedative, if desired, and occasionally the laxative and refrigerant tonic as above.

The advantages are:

1. Short time required for recovery.
2. Cessation of pain.
3. No scar.
4. No operation.
5. No detention from business.

Importance of Early Removal of Caseous Lymphatic Glands.

Dr. G. R. FOWLER concludes an article on this subject, (*N. Y. Med. Jour.*), as follows: To summarize them I would briefly call attention to these points: 1. That what may appear—and in the opinion of the older teachers was—an innocent cheesy gland, which had become so from an inspissation of its contents, is really the site of an infiltration of material which rapidly becomes propagated and constitutes the so-called caseous lymphadenitis. 2. That this caseous infiltration may be, and in all probability is, either the bearer of, or the soil proper for the cultivation of the spore or germ upon which the anatomical product known as tubercle depends for its formation. 3. That there is a period of

quiescence varying perhaps in different individuals, during which no advance in the disease takes place, but during which the patient is threatened with an outbreak of general tuberculosis. 4. Whenever such caseation is within reach of surgical art, the same rule that is applicable to carcinoma and sarcoma—namely, early, thorough and complete removal—should be practised; and this rule might be of service in those doubtful cases where a persistent lymphadenitis, without caseation occurs, and no explanation or reason for its existence can be found, as well as to enlarged and indurated glands found in the neighborhood of the site of caseation.

Bleaching Sponges.

According to *Items of Interest*, the subjoined method answers well: Remove the sand by shaking; wash the sponges in hot water, and press as dry as possible. Then place in a bath of dilute muriatic acid for half an hour, remove, and after washing well in hot water, place in a bath of fresh acid, to which has been added six per cent. of hypo-sulphite of soda, and allow it to remain for twenty-four hours. The sponge is then finished by washing in water and drying.—*Med. Brief.*

VENEREAL DISEASES.

Treatment of Venereal Diseases in New York.

A correspondent of the *Canada Medical Record*, writing from New York, says:

We will now pass into the venereal ward, not, however, so much for the purpose of learning the signs, symptoms and pathology of venereal diseases (for there has been little change in the teaching on those points), as to acquire

a knowledge of the latest and most approved methods of treatment. As far as I can learn, more importance is attached to irrigation of the urethra than to any other remedy for gonorrhœa. A bottle containing a gallon of warm water is placed near and slightly above the patient. A catheter (about No. 6 in size) is introduced to the membranous portion of the urethra. To this instrument a tube passing from the faucet of the bottle is attached, and the water is allowed to run *ad libitum*. I think that the longer this is kept up and the oftener it is performed, the more sure and speedy will be the cure. Chancroids are, as of yore, cauterized and dressed with iodoform. The chancre of syphilis is simply kept clean and dusted with calomel, and if the sore heals kindly no internal remedies, save such as might be indicated to put the patient's system in good condition to resist the disease, are used until other symptoms present themselves, and then the favorite remedy is the famous "pil. duo," which consists of one grain of sulphate of iron and two of blue mass, given three times a day. When, again, these symptoms have subsided the medicine is dropped. To make a long story short, instead of two years of mercury the symptoms alone are treated. There is much logic in this plan of dealing with syphilis, but all will admit that it is easier to carry it out in the hospital than in private practice, especially when it is known that the much-dreaded rash may be prevented or masked by continuous treatment from the date of the initial lesion.—*Weekly Med. Review.*

Gross on Gonorrhœa.

In the early treatment of gonorrhœa, Prof. GROSS condemns the use of injections. His plan is as follows: If possible, put the patient to bed; give him

at the outset a purge, by administering Epsom and Rochelle salts, each $\mathfrak{z}$ ij., in lemon syrup. Allow no meat or any stimulating articles of diet, etc. Malt liquors do more harm than alcoholic, so interdict both. No tea or coffee, but give him milk, eggs and some oysters, etc. Three times daily he is to hold the penis in a cup of hot water—quite hot. Keep the organ there for five minutes at a time, then wipe it gently each time.

The internal treatment will be by the “antimonial and saline mixture.” $\mathcal{R}$. Antimonii et potassii tartrat., gr. $\mathfrak{x}$ - $\mathfrak{x}\mathfrak{o}$; magnesii sulphatis, $\mathfrak{D}$ ij.; morphinæ sulphatis, gr. $\mathfrak{x}$ - $\mathfrak{x}\mathfrak{6}$; tinct. aconiti radice, gtt. $\mathfrak{j}$.; liquor potassii citrat., $\mathfrak{f}$ $\mathfrak{z}$ ss.; olei limonis, gtt. ss.; elixir. simplicis, $\mathfrak{f}$ $\mathfrak{z}$ ss. M. Sig.—Ter die.

By this treatment the urine will be rendered bland and unirritating. Should the urine persist in “scalding,” then add to the above prescription gtt. $\mathfrak{x}$ tinct. cannabis indicæ. To prevent or cure chordee, order at night a suppository of: $\mathcal{R}$. Extract. opii; camphoræ, $\mathfrak{a}\mathfrak{a}$ gr. iij.

In the course of four or five days the discharge from the urethra will look more like laudable pus; then order an injection: $\mathcal{R}$. Hydrargyri chloridi corrosivi, gr. ij.; aquæ destillat., $\mathcal{O}$ j. Sig.—With a syringe that holds an ounce, inject into the urethra—having first “flushed” the canal several times by voiding urine—and retain the fluid for five minutes.

Internally, a useful combination is that used at the out-door department at the hospital, and consisting of: $\mathcal{R}$. Cubebæ, $\mathfrak{z}$ ij.; alum pulv., $\mathfrak{z}$ j. M. Sig.—Of this take a heaping teaspoonful in a tumbler of water ter die; the dose to be increased.

Should the discharge per urethram still persist, use an injection of: $\mathcal{R}$.

Liquor. plumbi subacetatis, $\mathfrak{f}$ $\mathfrak{z}$ j.; aquæ, $\mathfrak{f}$ $\mathfrak{z}$ x. M. Or: $\mathcal{R}$. Plumbi acetatis, gr. ij.; zinci sulphat., gr. iij.; aquæ, $\mathfrak{f}$ $\mathfrak{z}$ j. M. Or: $\mathcal{R}$. Acidi tannici, gr. ij.; aquæ, $\mathfrak{f}$ $\mathfrak{z}$ j. M.—*Coll. and Clin. Record.*

Transmission of Syphilis.

Kassowitz of Vienna, formulates the mooted points of this question as follows:

1. The observation of many physicians, especially pediatric practitioners, proves that women, who never exhibited symptoms of syphilis give birth to syphilitic children. In these cases there is no doubt that the virus is contained in the spermatic secretion of the father.

2. In many cases the mother subsequently shows no syphilis. Therefore in such cases no infection of the mother by the child has taken place.

3. A retroinfection of the mother by the fetus is theoretically possible, but not definitely proven.

4. However, it is beyond doubt, that those mothers of syphilitic children, that never showed symptoms of syphilis, are much less receptive for syphilitic infection than other individuals.

5. Such women are not to be considered in a latent syphilitic state, because first: All objective signs are wanting; and second: They give birth to healthy children when impregnated by a healthy male.

6. It is a fact that women with recent syphilis may give birth to healthy children. The virus is not transmitted from mother to child in such cases; and such children have a certain degree of immunity to syphilitic infection.

7. In some few cases a transmission of the virus from the mother, that was infected during pregnancy, to the healthy fetus, has been proven.—*Weekly Med. Review.*

Exfoliative Dermatitis in a Syphilitic.

M. POUPON records in *La France Medicale* an interesting case. The patient, a woman aged 35, although denying it, was found to be suffering from syphilis. Some time after the skin was observed to become red, tense and accompanied by a general pruritus. Scales soon formed and separated abundantly, being somewhat small on the scalp and larger on the chest. The scales were large, abundant, attached at the centre and alopecia marked. The nails of the hands and feet were considerably involved. The trouble lasted about two months and a half. The question that arose was, whether the syphilis had any causative influence in the production of the exfoliative dermatitis. The only objection to make to the proposition is that specific treatment which was very energetic for a certain time, did not seem to bring about any results for a period of two months and a half. Besides this, the patient was saturated with mercury during the eruption, as a few days previously she was affected with mercurial stomatitis. On this account the author, very justly, has hesitated to pronounce the cause of the dermatitis to be syphilis.—*St. Louis Med. and Surg. Journal.*

The Treatment of Lupus by Erosion or Scraping.

Dr. J. HERBERT STOWERS, having obtained his most satisfactory results from these methods, thus writes about them in the *Brit. Med. Jour.*, Jan. 3, 1885 :

The process of erosion advocated by Volkmann is carried out by means of a small hollow and elongated spoon, or scoop, with a moderately sharp edge, set in an ivory or bone handle. The special advantage is, that when the scoop is applied with considerable force, all the diseased tissue, or cell-growth,

which is exceedingly vascular and friable, immediately breaks down, and is removed, while the healthy surrounding structures of the skin are too dense and fibrous to be included in the operation.

Those who have had experience of this method, will concur as to the remarkable way the soft, spongy, boggy tissue yields to the scoop, and how much more certainly can the extent and depth of the disease in this manner be estimated. All the cases I have treated thus have been of long duration, and the new growth in each has existed over an extensive area.

The operation should not be undertaken except with the aid of an anæsthetic, for much of its after success depends upon the complete removal of every tubercle and, consequently, occupies a considerable period of time. With so vascular a structure also, much hemorrhage results which should be entirely arrested before the solid nitrate of silver is used. I repeat—for it cannot be too carefully noted—that thorough eradication of the abnormal growth must be secured before the scoop is laid aside. In several instances I have operated upon large masses of disease situated over the great vessels of the neck, and, despite the force required, I can truly assert that, with even moderate care, no danger occurs of wounding them.

When the process of scraping is completed, and the hemorrhage arrested (local depletion being, doubtless, an aid to results), the serous discharge escaping from the wounds should be carefully soaked up with clean blotting-paper. Attention to this latter point will obviate the risk of the dissolved caustic running over the surrounding healthy integument, and so adding needlessly to the suffering of the patient.

It is necessary that the nitrate should be pushed deeply into the holes and

interstices left by the instrument ; in fact, it should be made to burrow into the tissues quite as extensively and deeply.

Considerable inflammation of course follows, which assists ultimate absorption ; but the intensity of the pain does not last nearly so long as that attending the use of other caustics.

The parts should be dressed with lint well saturated with carbolized oil ; the next day more oil being allowed to run under the dressing. The second day after the operation, when suppuration has commenced, fresh carbolized oil-dressings should be applied, and so on daily. So severe is the smarting, if water be used, that it is preferable, until the discharge is considerable, to cleanse the part by gently rubbing with lint dipped in olive oil, to which a drop or two of carbolic acid may be added. Later, when the sloughs are separating, a weak carbolic acid lotion is advisable for the same purpose, and may with advantage be used with a syringe.

In the cases under my care, which have been, so far, attended with permanently good results, it was necessary to repeat the operation at intervals varying from six to eighteen months ; indeed, in some, several repetitions have been compulsory. But I contend, and that very strongly, that, if every new tubercle be immediately attacked, the instances will be few and far between, if any, in which, with the addition of appropriate internal constitutional treatment, the tendency to new development will not be outmatched.

The destructive results of this rebellious affection are too well known to require a word more in this direction ; suffice it to say that, in five cases, at least, I have secured noses marked now with a relatively limited scarring, which would otherwise (if left without local

treatment) have broken down by extending disease and secondary ulceration, to the production of irremediable and hideous deformities.

The natural tendency to recur must never be accepted as sufficient reason for not contending again and again with the disease until that age or condition of health be reached which will secure lasting and permanent immunity.

I would recommend, not less strongly, that any neighboring tissue, while suspicious in character, though not readily breaking down under the scoop, should be freely submitted to multiple punctiform or linear scarification, combined with a liberal use of the solid nitrate of silver.

Gonorrhœa in the Female.

Dr. ANDREW F. CURRIER (*New York Medical Journal*) has not seen any brilliant results from internal medication in this disease. The therapeutic agent upon which he places most reliance is the hot vaginal douche properly given. A nozzle of sufficient length should be introduced into the posterior fornix, and the vagina kept filled with water as hot as can be borne for about ten minutes at a time. This should be repeated two or three times a day. The diet must be light and un-irritating. The bowels should be kept soluble. Plenty of water should be drunk, especially the alkalines, if the bladder or urethra be involved.

Various astringent agents may be added to the hot water injections if deemed necessary. In cases in which the cervix was mainly affected Dr. Currier obtained excellent results from the application of solution of nitrate of silver, sixty grains to the ounce. Weaker solutions have no apparent effect. The use of bichloride injections by patients themselves has not proved as satisfactory

as was anticipated. A tampon saturated with the fluid extract of eucalyptus will at times be found grateful to the patient, as well as antiseptic and astringent in its action.

Chloral Hydrate for Chordee.

In the *Med. Age*, Dr. MORRIS C. L. KITCHEN says that for two years he has been using chloral hydrate, gr. x., potas. bromid., gr. v-x to aq. dest. $\frac{3}{4}$ j as an injection for chordee, and has *never* known it to fail of affording perfect relief. He usually adds morph. sulph., gr. ij to the $\frac{3}{4}$ j.

He does not think from his observation that chloral hydrate, or this mixture is indicated in all stages of disease; but when chordee comes on, he can confidently recommend the use of it, and usually no other injection is needed afterwards.

Bartholow on Gonorrhœa.

According to Prof. BARTHOLOW, the following, in gonorrhœa, after the acute stage, is efficacious: $\mathcal{R}$. Zinci sulphat.; plumbi acetat., $\overline{\text{aa}}$ gr. viij.; ammonii chlorid.; aluminis, $\overline{\text{aa}}$ gr. iv.; aquæ rosæ, f. $\frac{3}{4}$ j. M. Sig.—As an injection.
—*Med. and Surg. Reporter*.

DISEASES OF THE EYE AND EAR.

Therapeutics of Eye Diseases in Relation to General Diseases.

Dr. H. MACNAUGHTON JONES, speaking of the therapeutics of eye diseases (*Practitioner*), says: Obviously our prognosis and much of our success in dealing with many local affections will depend on the correct appreciation of the influences operating both in producing and aggravating these. This influence on treatment can be best realized if we classify the most important

morbid states of the eye which are induced by diseases of remote organs. Taking first the *digestive system*, we find as the result of diabetes, cataract, iritis, retinitis, optic neuritis, retinal hemorrhage. Gout causes conjunctivitis, iritis, retinitis, hemorrhage infarctions. Diarrhœa and dysentery induce cataract. Hepatic congestion and icterus bring about various visual aberrations, retinal hyperemia and hemorrhage. During dentition occur phlyctenular states of the conjunctiva and cornea, lenticular degenerations, while later on from caries of the teeth arise different reflex disturbances, as for example mydriasis and myosis, amblyopia. The pupil is also affected, and retinal congestion may arise from the presence of intestinal worms. When we turn to the *circulatory system*, we find arterial and venous pulsations in the retinal vessels, retinal hyperemia, hemorrhage, infarctions, detachment, embolus of the central artery, thrombosis, and optic neuritis, as the results of cardiac disease, principally mitral valve disease and hypertrophy. Aortic and other aneurisms, and atheromatous states of the arteries, cause retinal apoplexies and intra-ocular hemorrhages, and are occasionally accompanied by myosis or mydriasis. Albuminuria has following in its train retinitis albuminuria, papillitis, retinal hemorrhage and detachment, hyalitis, and hemorrhage into the vitreous, glaucoma, and optic atrophy. Anemia, chlorosis, and leukemia, in their aggravated and pernicious forms, are occasionally attended by papillitis, hemorrhage, and embolus of the central artery. Embolus may also accompany violent hematemesis, hemoptysis, or menorrhagia. Ovarian and uterine disorders are the sources of retinal mischief much more commonly than is suspected. The derangements most

likely to affect the eye are, ovaritis, suppressed, irregular, and excessive menstruation, uterine tumors, and the pregnant state. The latter condition, through the low tension or high tension of the blood-vessels, the existence of albuminuria, the excess of fibrine, the excessive reflex irritability of the nervous system, is productive of all the complications which result from the albuminuric state, while retinitis and optic neuritis, hemorrhage, embolism, hyalitis, are occasionally caused by ovarian and menstrual derangements.—*Louisville Med. News.*

Amblyopia Nicotiana.

(*Med. Ztg.*)—De B' remarks on whether *Amblyopia ex abuso* is caused by alcohol or tobacco. He found

1. With three—none alcoholic—smoking women, characteristic symptoms, diminished central vision, central color-scotoma with normal vision.

2. In woman, amblyopia from tobacco is rarer than from alcohol.

3. Smoking on an empty stomach, in enfeeble condition from whatever cause, promotes the development of amblyopia. Dyspepsia and insomnia may be both the cause and effect of smoking.

4. Good food and a moderate use of alcohol, antagonize the effects of tobacco.

5. Amblyopia nicotiana is a functional vaso-motor disturbance and not the product of a neuritis.—*St. Louis Med. & Surg. Journal.*

Mechanical Treatment of a Chronic Disturbance of the Sound-Conveying Apparatus

By LUCÆ (*Arch. f. Ohrhklde.*)—This affection is well known as sclerosis of the tympanum, dry catarrh, adhesion in the tympanum, ankylosis of the ossicles, hypertrophied inflammation of the mid-

dle ear. In all such cases the air bag was the standard remedy, it was intended to loosen by it the ligamentous apparatus of the ossicles, and to inflate the middle ear. According to Lucæ, while it doubtless will make the membrana tympani bulge out, yet the ossicles are very little, if any, moved by it. This difficulty can be met by a direct pressure upon the short handle of the malleus, which is very slightly sensitive. With a well wadded probe, he pressed upon it, with encouraging result. He follows this up with the air douche with every reason for a rapid improvement.—*Ibid.*

Cocaine Hydrochlorate in Otalgia due to Catarrhal Inflammation of the Ear.

In the *Therapeutic Gazette*, Dr. HENRY REDER tells us that after treating a case of severe otalgia with all ordinary remedies, including the hot water douches, leeches to the tongue, and paracentesis of the membrana tympani, without much relief, he thought of cocaine hydrochlorate. He inserted into the vial of the atomizing tube of a Codman & Shurtleff steam atomizer a four per cent. solution, and advised the patient to fill her mouth with the spray, close her lips, expand her cheeks, and so force the vapor into the eustachian tubes; this was repeated at intervals of three minutes. He then adjusted the nasal tube of the atomizer, inserted it into the external auditory meatus, and also sprayed the external canal at intervals of three minutes. After fifteen minutes from the last application the patient was wholly relieved, and passed a comfortable night.—*Med. and Surg. Reporter.*

Eye Lotion.

℞. Sodæ Bibor. grs. xx.; aq. camph. ℥ ij.

DISEASES OF THE SKIN.

The Treatment of Ringworm of the Scalp.

The following is a simple and very effectual method of treating ringworm of the scalp:

The child affected is made to sit down on a chair before a washing basin half filled with warm water; a folded towel is first of all tied round the child's forehead in such a way that no fluid poured on the head can trickle down into the eyes.

It is best to cut the hair short all round the affected part. If there be many spots of ringworm, the whole head may be closely cropped. Have ready a two ounce bottle of common spirit of turpentine, an ounce bottle of tincture of iodine, a camel-hair brush, and a 10 per cent. cake of carbolic acid soap.

While the child bends forward over the basin, the spirit of turpentine is freely poured over one or more spots at a time, the forefinger being used to rub the turpentine well into the scalp. Almost immediately the dirt and greasy scabs disappear, and the short broken hairs are seen to stand up like bristles. Generally, in about three minutes' time, the child cries out, "Oh, it nips!" then we know that the turpentine has penetrated deeply. Immediately the piece of carbolic acid soap is well rubbed into the parts which have been acted on by the temperature, and warm water is freely applied to make this soap into a lather, by which means the head is well washed, and soon appears to be beautifully cleaned. The smarting, such as it is, quickly disappears after the application of the soap. The head is then well dried with a towel. Common tincture of iodine, in two or three coats, is now painted well over the affected parts,

and allowed to dry. As soon as the hair is dry, some carbolic oil (1 in 20) is rubbed all through the hair to catch such spores as may be there.

This treatment, applied every morning, or morning and night in very bad cases, generally cures the worst cases in the course of a week.

It is an interesting chemical fact that spirit of turpentine, or, more correctly, oil of turpentine, is a powerful solvent of iodine. This solution of iodine in turpentine is a most powerful germicide, and quickly destroys the fungus of ringworm. If tincture of iodine be applied to the spots which have been treated as above, first with the spirit of turpentine, and then washed with carbolic acid soap and water, it finds its way down into the epithelial tissues, and into the hair follicles, following the course which the spirit of turpentine has taken. It is of no use to apply watery solutions of germicides, until the greasy or sebaceous matter of the scalp has been first removed.—*St. Louis Med. and Surg. Journal*.

A Hair Tonic.

The best remedy to stimulate the growth of hair, and to keep the hair from coming out, is uvedalia. If the scalp is dry and harsh, the ointment of uvedalia may be rubbed up with an equal part of vaseline and scented. If the sebaceous secretion is free, the tincture may be employed, adding bay rum. one to two parts. In either case the scalp is thoroughly rubbed with the remedy once or twice a day.—*Ecl. Med. Journal*.

Eczema.

R. Ung. zinci ox., $\frac{5}{8}$ ij.; precip. alf., grs. x. Sig.: Ointment.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

A Rare Case of Fracture of the Right Transverse Process of the Atlas.

Dr. L. C. ARMSTRONG (*Weekly Med. Review*). H., an American, aged 32 years, while attending a political meeting on the night of October 30, 1884, accidentally fell into an altercation with an individual, and friends standing by interfered and prevented any serious occurrence at that instant. He moved on through a densely crowded street and had gone about 150 feet when he was overtaken by his pursuing antagonist coming up from behind with a heavy bludgeon, generally supposed to be a base ball bat or a wagon spoke, with which he struck him a violent blow, felling him instantly to the ground.

I was at once called to the dying man, and my office being located not exceeding 175 feet from the occurrence, I reached him within forty seconds after he was struck. There was no respiration after I reached him, the pupils of the eyes were widely dilated, and the pulse ceased beating within one minute and fifteen seconds after receiving the blow.

On manipulating the head I was satisfied at the time that the neck had been dislocated. Immediately after death the body was removed to the house of a friend.

On the following morning I was requested by the prosecuting attorney of the county to hold a post mortem on the body of the deceased, and at 9 o'clock, together with two assistants, I proceeded to the room where the body had been kept over night. On a thorough examination of the body there were no perceptible marks of violence. But it was evident to all the physicians

present that the atlas or axis had been dislocated, and we at once proceeded with the autopsy.

In order to reach the dislocated vertebra a vertical incision was made, beginning at the spinous process of the seventh cervical vertebra, and extending to the occipital protuberance. Also transverse incisions were made, beginning at the spinous process of the fourth cervical vertebra and extending on each side to the posterior border of the sternocleido-mastoides muscles, which enabled us to reflect the four quadrangular flaps formed by these incisions, exposing the muscles in this region.

On dividing the integument, superficial and deep fascia, all appeared perfectly natural; but when the muscles were detached from the occiput and processes of the upper vertebra, an unusual amount of semi-fluid blood was discovered. Without doubt this unusual quantity of semi-fluid blood in this particular locality was due to the rupture of the vertebral vein, as will doubtless be perceived in a further description of this case.

After removing by absorption with sponges the blood which obstructed the vision, we proceeded to examine the vertebra and their ligaments, and taking hold of the spinous process of the second cervical vertebra, at the same time taking hold of the posterior arch of the atlas and manipulating the second cervical vertebra, it was readily perceived from the extensive movement possible between these vertebræ, that there was a stretching of the atlo-axoid ligaments, sufficient to permit displacement, which had compressed the cord so as to entirely destroy the functions of the phrenic nerve.

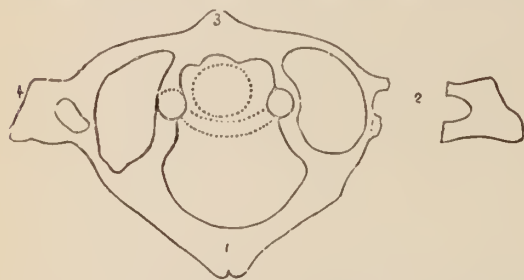
But in order to more perfectly understand the injury done these parts, the atlas and axis were removed by dividing

the ligaments and disarticulating them from their connectives. After the removal of the atlas and axis, on close examination it was discovered by manipulating the right transverse process of the atlas that it was completely frac-

ture might occur in various ways from gun-shot wounds, but it is most difficult to perceive just how this fracture was produced by a blow struck at random with any kind of instrument, and a fracture of this process, doubtless, would not occur again in a thousand similar cases of dislocation of the vertebra in this region.

Among the thousands of recorded fractures so widely differing in their ever-varying peculiarities and extreme rarities, this extraordinary case seems to exist without a parallel in

their multitudinous record.



1. Anterior arch. 2. Right transverse process. 3. Posterior arch. 4. Left transverse process.

tured at its base. This process was held in its natural position by the ligaments, but on the removal of the ligaments it was found to be completely separated from the body of the vertebra, as will be seen from the annexed cut.

As stated, H. was walking at the time he received the blow; the party who struck the blow approached from behind and struck a violent blow with some kind of instrument, supposed to be a base ball bat or wagon spoke, by parties near the occurrence. Evidently in striking this blow the stroke was upwards and lateral, and the instrument must have been round or oval with a smooth surface, otherwise there would have been more or less abrasion of the skin.

This case is a most remarkable one, on account of its extreme rarity and the almost inexplicable manner in which the fracture was produced. Dr. Hamilton in his "Work on Fractures and Dislocations," reports only a single case of fracture of the transverse process of the atlas, and this fracture resulted from a gunshot wound.

It is not difficult to perceive how this

False Doctrine in the Treatment of Fractures.

Dr. JOHN B. ROBERTS, M. D., *Jour. of the Am. Med. Association*. The idea is entertained by many that every fracture of the extremities should be treated by a special splint or apparatus. The simplicity with which fractures are treated by us in the Philadelphia hospitals has often caused surprise to those practitioners who come to us for post-graduate instruction.

The quite frequent use of a bandage, next to the skin, before the splint is applied to the extremity, is due to false teaching, and is fraught with danger, because of the possibility of its causing unexpected constriction in the event of rapid inflammatory swelling. This primary bandaging has been advocated to prevent swelling and muscular spasm. That it does either to any beneficial extent is doubtful. We possess other and less dangerous methods that are more effectual for such purposes.

It is quite commonly believed that ensheathing callus is one of the essentials of proper union after fracture, while the truth seems to be that ensheathing

callus is seldom found except in fractures of the ribs and other fractures where immobilization of the fragments is imperfectly accomplished. A fracture so held in proper coaptation that motion cannot occur, heals without ensheathing callus in nearly all instances. Cicatrization goes on in bone wounds essentially as it does in wounds of soft parts.

Early institution of passive motion during the treatment of fractures near joints, or involving joints, is still insisted upon by many practitioners. One of the greatest sources of anxiety to the young or inexperienced doctor is to know when to begin passive motion. He fears to begin too early lest he disturb the process of union; he dreads to leave it too late lest he have an ankylosed limb as the result of his tardiness. The proper course, it seems to me, is something like this: If the joint is involved in the line of fracture, passive motion at an early stage will not prevent ankylosis, but may increase it by causing a greater degree of arthritis; if the joint is not invaded by the fracture line, early passive motion is not needed, because ankylosis will not occur, unless violent inflammation of the soft parts arises, which inflammation passive motion is more likely to increase than to decrease. In accordance with this view I advise that no passive motion be made earlier than three or four weeks in any case. The adoption of passive motion earlier than this has often in energetic but injudicious hands given much unnecessary pain, and perhaps in many cases increased the arthritis and subsequent stiffness. The degree of restoration of function possible after articular fractures is only determinable after many weeks. Passive motion should certainly not be commenced while arthritis is acute, and not as a rule until

union of the fracture is pretty well accomplished. When it is attempted, the occurrence of arthritic reaction is an indication that it must be still longer postponed.

Splints and dressings are often continued too long, and thereby the disability of the patient for attending to his business prolonged. In uncomplicated fracture of the tibia and fibula, the patient should be able to go on crutches to his store or office in two or three weeks, provided that a silicate of sodium or a gypsum dressing has been applied. After fracture of the fibula of ordinary severity, one week's confinement to the house is sufficient, provided that some supportive dressing be thereafter worn, and crutches used. The usual uncomminuted fracture of the lower end of the radius needs no splint after ten days or two weeks. Although, of course, function is not perfectly restored, the hand and fingers can be used for many purposes involving little muscular effort.

It is false doctrine that still insists upon the great risk incurred, when a closed fracture of the cranium is converted by the surgeon into an open one, in order to explore supposed dangerous characteristics which, if present, threaten life from probable secondary encephalic inflammation. The possibility of septic infection is increased, I admit, but so little, that the danger of obscurity in diagnosis and consequent erroneous treatment is often much greater.

Fractures of the nose have long been and still are, often treated by useless dressings. The conventional application to broken nasal bones, is a strip of adhesive plaster placed across the bridge of the nose, with the idea that it will by its adhesion to the skin hold the broken fragment upward, and prevent depression of the nasal arch. That it is quite impossible for a flexible tissue,

like adhesive plaster, to act in this manner will be recognized with the mere statement. If comminution tends to allow displacement, the plaster will not give sufficient rigidity to obviate the tendency. If it does no good, why disfigure the patient by making him wear it? The proper method of retaining fragments in position when great tendency to displacement exists, is by transfixing pins; but as the object of this paper is not to deal with plans of treatment, I shall not discuss the procedure at this time. Another custom quite prevalent is to put tubes in the nostrils after nasal fractures or operations, when we all would prefer mouth breathing to wearing nasal canulas, which are unsightly, uncomfortable, dirty, and which as a rule soon become clogged. Breathing through the mouth for a few days is easily borne when an acute nasal catarrh is contracted; therefore its performance after nasal injuries is not intolerable. If a plug is required in the nostril to maintain position of the fragments let it be introduced, and let it be a tube if you choose; but it will usually become clogged and offensive. A solid plug will in most instances be more cleanly.

Deformities of the nasal bones and cartilages often become permanent after fracturing injuries, because it is believed that there is little relief for the displacement. Properly conducted surgical treatment at the beginning or operative measures afterward will relieve much of the unhappiness resulting from unseemly lateral deviations and irregular distortions of the nose. The importance of this feature in the facial lines renders defects in conformation so noticeable that in hypersensitive persons mental characteristics are often due to nasal deformity in childhood. It may be remembered that a commander

of ancient times gave the order "aim at their noses," knowing that the enemy feared facial disfigurement more than actual death. The false doctrines prevalent concerning nasal fractures should therefore meet an early overthrow. It is more important to treat a broken nose well than a broken leg.

The use of the axillary pad in treating fractured clavicle is of little or no value. The important factor in the treatment is to so fix the inferior angle of the scapula, that the scapula cannot slide forward upon the lateral wall of the thorax, as it tends to do, because the clavicle, which is its only bony attachment to the trunk, is broken. Displacement of the fragments in broken clavicle is to be prevented by steadying the lower end of the scapula and not by an axillary pad, which is ineffectual as a fulcrum against which to use the humerus as a lever to throw the acromial end of the clavicle outwards and backwards. The axillary pad is useless unless large and hard; if large and hard it cannot be worn without discomfort, that would usually be accompanied by danger of injurious pressure to soft parts.

The employment of an internal angular splint for fractures in the vicinity of the surgical neck of the humerus is founded on false premises. The axillary muscles prevent the upper end of the splint extending high enough into the axilla to control the upper fragment. Hence the splint does not keep the upper fragment at rest, and, by its projection beyond the elbow or hand, gives more leverage, by which unexpected blows may cause motion of the lower fragment. It is better to use the thorax as a splint, and bandage the arm to the chest, with perhaps a small amount of packing, such as absorbent cotton or lint, in the axilla to steady the upper fragment.

The fallacy of treating fractures of the condyles of the humerus by anterior or posterior rigid angular splints, and thereby causing deformity and disability by impairing the external angular deviation of the axis of the upper extremity, was shown by Allis four years ago. Yet this is probably the method by which such fractures are treated by most of the members present to-day. The loss of the carrying power of the arm after treatment of condyloid fracture by such splints, is, I have no doubt, a common experience, though many may not have recognized the cause.

In fractures at the middle of the forearm, interosseous pads are seldom, if ever, required, if the fragments are moulded into proper position and the forearm is put in a position midway between pronation and supination. The interosseous space cannot easily be preserved by the use of an interosseous compress, if moulding and the position mentioned will not do it. The bones are too much enveloped in muscles to be controlled by a superficial pad, even if it is long and narrow and hard. At least such will be found the case in most instances. A lamentable practice, founded on false doctrine, is the use of a straight, that is flat, splint for the ordinary fracture of the lower end of the radius. The palmar surface of the lower third of the radius is concave, therefore the splint must be curved. Yet the practice of employing a Bond's splint or some other form of flat splint is common. A convex splint or a splint with a hard pad, with a convex upper surface, is the only form of a splint proper to use on the palmar aspect of the fracture. A straight splint will do well on the dorsal, but not on the palmar, surface. Use, therefore, either a curved palmar or a straight dorsal splint, if you desire cure with the least possible de-

formity. The stiffness of fingers and deformity, so frequently seen after these fractures, are due to imperfect reduction of the fragments and improper splints. In many cases reduction without the application of any splint will give better results than reduction with the use of a flat splint.

The teaching that fractures of the shafts of metacarpal bones should be treated by palmar splints, may not be universal, but it is, I think, very common. In oblique fractures the deformity can often be overcome best by continuous extension adjusted to the finger by means of adhesive plaster, as is done in fractures of the femur. Strips of adhesive plaster attached to the finger and an extending cord, preferably of rubber, fastened to a splint placed under the wrist and palm and extending beyond the finger tips, is a serviceable dressing for correcting overriding in metacarpal fractures.

The habit of measuring the length of the lower extremities in suspected fracture of the femur is founded on a mistaken impression that the legs are of the same length. The frequent asymmetry in length of normal limbs has been so often demonstrated, that it is surprising to see surgeons constantly employ this as a method of diagnosis. Even if the legs were known to be of equal length the measurement would probably be inaccurate, because of the difficulty of avoiding tilting of the pelvis and of applying the tape to exactly similar points on each side. When it is known that normal legs differ in length, the folly of placing any diagnostic dependence on the figures obtained is apparent.

The disability liable to follow fractures of the femoral neck in patients beyond middle life, is not as great as it is often stated to be. Whether this is

due to a mistaken diagnosis between intracapsular and extracapsular fracture, I know not; but I am convinced that the impresssion prevails to a great extent among the profession, that fracture of the neck of the femur in an old person means almost helpless lameness. Such is not the case. Very good use of the limb quite frequently happens.

In oblique fractures of the legs with overlapping reduction can at times be facilitated by tenotomy of the tendo Achillis. This means of overcoming displacing muscular action is perhaps not as often resorted to as it should be.

Extension by traction applied to the head and legs should be better known, I think, as a possible method of reducing fractures of the vertebra. In many cases it will do no good, but in others it may.

The aversion to applying coapting hooks to the patella and olecranon, when apposition is otherwise impossible, is, in my opinion, the result of false teaching and observation.

Treatment of Habitual Dislocation of the Shoulder Joint.

Dr. GEO. A. KEDDEN reports the following case and treatment in *Weekly Med. Review* :

Frank T. Rackham, aet. 27, consulted me, with a subcoracoid dislocation of the right humerus, which, under an anesthetic, was easily reduced. My attention was arrested at once by the lax condition of the joint, and by the roughness of the glenoid cavity, which was apparently almost entirely filled with new deposit, and gave a grating sensation on movement of the humerus. The anterior portion of the capsule seemed to be gone, and I greatly feared that the head of the humerus would drop out on the slightest motion of the arm. I carefully held the arm in position, and on his re-

covery from the anesthetic, obtained the following explanation of the existing condition. The patient stated that on July 3, 1875, while swimming in a swift current, his shoulder was dislocated, and that up to this time, November, 1881, some thirty five recurrences of the accident had taken place. He stated that elevation of the arm beyond a certain point would throw the head out of the cavity, and as he was often required in his work to place his arm in this dangerous position, it came out oftenest from this cause. It was also displaced a number of times during epileptic convulsions from which he suffered as a result of a sunstroke. It was displaced several times by his turning over in bed, and one time by the jarring of a wheelbarrow, which he was pushing over rough ground.

In two weeks he appeared again with the same difficulty, which was relieved as easily as before. At this time, the patient, being much discouraged, and declaring that suicide would be the only source of his relief, I suggested an appliance to keep the bone in position, but he demurred at once, expressing a belief that no appliance would prevail. In proof of this he produced an apparatus furnished him by Dr. Walston, of Decatur, and consisting of a steel plate 1-8 of an inch thick, and six by eight inches in dimensions, curved to fit the side, to which it was fastened by two straps passing around the chest and one passing under the perineum. From this plate a crutch extended to the axilla, and a chain extended to a leather band encircling the arm. The object of this apparatus was to prevent the ascent of the arm to the point of slipping, and the principle was excellent. The patient was able to wear it only a short time on account of the excoriation it caused, and it was speedily thrown aside. In

December, I reduced the dislocation for the third time ; April 11, 1882, for the fourth time ; in three days, April 14, for the fifth time, and in May for the sixth time in less than six months. This brings the total number of recurrences up to at least forty. I have taken some pains to verify this statement, and am confident that this number is correct. Certainly the condition existing was such as to warrant operative interference, had not another simpler and better means presented itself to my mind for trial.

Although the patient was becoming each time more despondent concerning his condition, he steadily refused to consent to the application I suggested until June 4, 1882, when, at my earnest solicitation, he permitted me to apply a Martin rubber bandage in the following manner : Commencing in front, at the median line, on a level with the nipple, pass to the arm just below the axilla, then one and a half times around the arm, then across the back and under the other arm to the point of departure. Repeat this course and tie the ends. Simple enough treatment, I am sure. The bandage was at first applied directly to the skin, but afterwards over the shirt. The patient soon found that the turn around the arm was uncomfortable, and modified the application by simply passing it over the arm, in which manner it was afterwards worn.

The treatment, much to the gratification of all concerned, was a success. The patient wore the bandage steadily for six months, and then, notwithstanding my warning, discontinued its use. In June, 1883, one year after its application, he paid the penalty of his indiscretion by suffering another dislocation. After reducing it and endeavoring to impress upon him the necessity of its continuous wearing, the bandage was applied again, and up to the present

time, a period of nearly sixteen months, no recurrence has taken place. Notwithstanding his previous experience, he has long since abandoned the use of the bandage without any bad effect, as I have already stated. He has remained steadily at work, using his arm with impunity for all purposes and in all positions required by his trade, without the least inconvenience. I might also add, as a proof of the permanence of the cure, that there has scarcely been a day in this time when he has not worked overtime (twelve to fourteen hours), and he has usually worked on Sundays. He states that while the arm has not quite the strength of the corresponding member, yet it is constantly improving, and answers all requirements.

An examination shows a depression at the superior posterior portion, probably due to the absence of the spinatus muscles and accounting for the deficient power of the arm. The bicipital groove appears to be unoccupied by the long head of the biceps. The cavity is somewhat broadened and some roughness of the arm still remains, but the joint, as I have said is, for all practical purposes, as good as before the receipt of the injury.

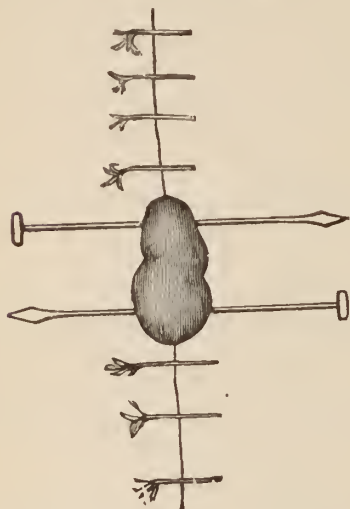
On the Use of Hare-Lip Pins for fixing the Stomach in Gastrostomy.

Dr. C. MACNAMARA, (*Annals of Surgery*) :

This method is first incidentally referred to in the report of a case published in the *Lancet* of August 2, 1884. A detailed description of it is as follows :

The stomach having been found, a fold of it is seized and drawn through the external wound with a pair of dressing forceps, whose teeth are covered with pieces of india-rubber drainage tubing slipped over them. The assistant holds the forceps while the operator transfixes the projecting fold of stomach

with two pins, placed parallel to each other, and about three-fourths of an inch apart. (See the diagram.)



These pins transfix the stomach *only*, not the skin. No sutures whatever are placed in the stomach. But the lips of the operation wound in the abdominal wall are closed with sutures which bring the peritoneal surfaces together. Of course an aperture is left where the piece of stomach projects. If the patient's condition is such as to require feeding by the stomach, an opening is made into it on the third day after the operation; the opening is only just large enough to permit of a soft No. 7 catheter being inserted into the stomach for feeding purposes. Eventually a rubber tracheotomy tube is substituted for this.

In my first operation a wire suture was placed through the stomach to keep the protruding piece of it pinned against the thorax, but I came to the conclusion that this proceeding served no useful purpose and was a superfluous addition to the hare-lip pins.

The advantages of this method of proceeding are :

1. The absolute security of the method of fixing the stomach.

2. The speed and ease with which it

is done. In this respect a very favorable comparison can be made with the plan of using numerous peritoneal sutures.

In the three cases of gastrostomy performed in this manner up to the present time, the results, from a surgical point of view, have been perfectly satisfactory, the stomach adhering to the abdominal walls in about a week, the patient's temperature not having risen beyond the usual point.

The Treatment of Severe Sprains.

The popular adage that a sprain is often worse than a broken bone is a surgical truth. To the life-comfort of patients and the reputation of practitioners, few injuries are more important than severe sprains. They are causes of acute pain, and often protracted disablement; and, subject to constitutional states, are the most potent factors in the evolution of articular diseases. A severely sprained joint, without actual fracture or dislocation of its constituent bones, may be the seat of extensive structural lesions, such as ruptures of fasciæ and tendons, detachment of ligaments with bony spiculæ, extravasation of blood into joints, tendinous sheaths, and contiguous muscles. With these conditions, swelling is so rapid that bony outlines and landmarks are soon effaced, and diagnostic precision becomes exceedingly difficult. In such cases Mr. SAMPSON GAMGEE (*Birmingham Med. Review*, February, 1885) believes that an anæsthetic should be administered as a most useful aid to diagnosis, and, at the same time, a potent aid to treatment.

Rest, position, and pressure are, however, the sovereign remedies for severe sprains. Under their influence the process of extravasation is arrested, and that of absorption promoted. By rest

is not merely meant the negation of active movement, but the maintenance of absolute immobility, and for this purpose Mr. Gamgee prefers moistened mill-board splints to plaster of Paris, because the former admits of being moulded, by successive bandaging while drying, as the swelling recedes. In cases of knee and ankle-sprains, suspension in a swing cradle is most useful, while in shoulder, elbow, and wrist sprains, a sling affords great relief after the joint has been immobilized. Immobility, however, must not be too long continued; under uniform elastic pressure swelling rapidly subsides, and so soon as the bony outlines of the joint are restored and the pain is abated, careful movements should be commenced. After the first week a sprained joint should be moved daily, and then rested and compressed, or worked and rubbed, according to progressive indications. Pain and heat are the two signs to watch, and, according to their rise and fall, joint-exercise is to be diminished or increased. In old cases in which heat in the joint is absent, douching, friction, and a continuous galvanic current are powerful for good. Compression, which is so beneficial in swollen and ecchymosed or swollen and inflamed joints after sprain, is paralyzing and injurious in cold and stiff ones. These want freedom, as the inflamed ones require constraint. Mr. Gamgee finally emphasizes the rule that bandaging should never be applied over a naked limb, but over cotton padding.—

Jour. Amer. Med. Assoc.

The Influence of Sex on the Coefficient of Resistance and on the Frequency of Dental Caries.

Dr. V. GALIPPE considers that, generally speaking, the density of the teeth in women is less than in men. It has

long been recognized that pregnancy diminishes the density of the teeth, but Galippe considers that this aptitude for dental caries frequently coincides with puberty, and is accentuated by each succeeding pregnancy. The cause of this he attributes, in common with Landouzy, to the lowered degree of alkalinity of the fluids of the body. In this connection it is interesting to note the frequency of biliary lithiasis and of mitral stenosis, which seem to be closely connected with the genital life of the female.

This diminished amount of alkalinity in the female seems to have two factors, the one dynamic or functional, the other organic or anatomical. From the dynamic or functional point of view, the nutrition of the woman is retarded; from the anatomical or organic point of view, the blood of man contains more corpuscles than the blood of the woman; therefore, the fluids of the body in man are more alkaline than in woman. To satisfy himself on these points, and as having a direct bearing upon the teeth, Dr. Galippe made a large series of observations in hospitals upon the reactions of the saliva in pregnant and newly delivered women, and in nurses as well. The result was that the saliva was found to be acid in a majority of the cases. Another set of observations was between men and women in comparable conditions, where the saliva was less frequently alkaline in women than in men, and where it was frequently acid. When the alkalinity existed, it was often so feeble as to be totally inadequate for the saturation of the acids which form in the mouth. The elimination of carbonic acid is greater in man than in woman; it is nearly double at the period of puberty.

Dr. Galippe in one case observed the saliva become acid during menstruation,

and accompanied by malaise. Besides these local phenomena, during menstruation the impulse of the heart is stronger, respiration is accelerated, and the amount of urea diminished. It is not to the frequent acidity of the saliva alone that this predisposition to dental caries is due. As has already been said, generally speaking the teeth of women have a density that is inferior to those of men; that is to say, they contain less mineral matter, and therefore their coefficient of density is inferior. Now, if we take the woman at the period of parturition we see how prejudicial this inferiority becomes.

The pregnant woman who does not receive, by means of a special alimentation, the elements necessary for the formation of the different tissues which constitute the fœtus, and particularly the osseous system, may sustain her first labor; but if these pregnancies be repeated without special care and alimentation, by drawing upon her own economy, her periclitral economy, of which dental caries is the most marked.—*Gaz. des Hôpitaux.*—*Jour. Amer. Med. Ass.*

Suggestions as to the Methods of using Cocaine.

In applying the solution to other mucous membranes than those of the eye, a camel's-hair pencil has generally been used, but under the very best management, and upon surfaces made as dry as possible, the pencil leaves but a very small quantity upon the surface, and it is not to be expected that complete anæsthesia is easily attainable in this way, however frequent the applications, and a profuse use of the agent does no good, since it immediately runs off the surface. Neither is it of any use to apply it to surfaces coated with

ing, if they are of the glairy kind, since efficient contact with the surface is then impossible, and the waste is as complete as an application to the skin covered by epidermis. So, on its application to painful ulcers, burns, etc., care must always be taken to obtain contact of the solution by having the surfaces perfectly clean. In applying it to denuded surfaces and to mucous membranes which will admit it, the best method is to have some light covering of the desired shape and size, that will hold the solution. For this purpose fine thin cotton or linen fabric is much better, and nothing can be better than well-worn fine handkerchief material. This is sufficiently absorbent to hold the dose, and thin enough to avoid waste, and to be closely applicable to irregular surfaces. When touched in situ, for resupply, the brush should be applied to the upper edge of the tissue, so as to run down through it before draining off, and the smallest possible quantity should be applied at a time if waste by running off would be avoided. Much solution is wasted by the use of camel's-hair pencils many sizes too large. Indeed, it is hardly possible to get a brush too small to convey this solution economically, unless large surfaces are to be coated. In the use of a brush for applying the solution it should never be dipped into the vial of solution, because it carries back secretions and excretions, which rapidly spoil the remaining solution, and it is thus wasted. The proper way is to drop out the quantity to be used on the bottom of a tumbler or wine glass, and dip the brush in this until it is all used, never putting any back into the vial. In this way any desired quantity may be used and none be spoiled or wasted. From reading the published accounts of the application of the solution, it seems highly probable that more

of it is wasted than is really utilized, and if this waste could be stopped without increasing the number of failures, the price of the chemical would soon come down.—*Squibb's Ephemeris*.

Sand-Bag for the Sick-Room.

One of the most convenient articles to be used in a sick-room is a sand-bag. Get some clean, fine sand; dry it thoroughly in a kettle on the stove. Make a bag, about eight inches square, of flannel, fill it with the dry sand, séw the opening carefully together, and cover the bag with cotton or linen. This will prevent the sand from sifting out, and will also enable you to heat the bag quickly by placing it in the oven, or even on the top of the stove. After once using this, you will never again attempt to warm the feet or hands of a sick person with a bottle of hot water or a brick. The sand holds the heat a long time; and the bag can be tucked up to the back without hurting the invalid. It is a good plan to make two or three of the bags and keep them on hand, ready for use at any time when needed.—*Popular Science News*.

Sub-Mucous Injections of Chloroform.

M. GASPARD GUILLOT, writing to the *Progres Medical*, gives his personal experiences in cases of obstinate dental neuralgia and alveola abscess, and says he finds this plan useful. Two or three drops are usually injected at a time. Dr. Doss, who had given a large number of injections, has met with marked success. The pain was quickly subdued without bad results.—*Weekly Med. Review*.

The Treatment of Enlarged Bursæ by Injections of Carbolic Acid.

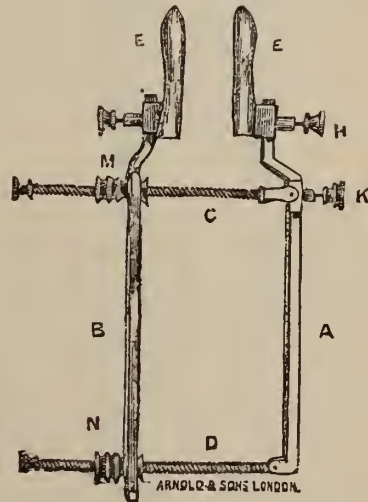
COURTADE (*Bull. Gen. de Therap.*) favors these cases by aspiration and injecting a solution of carbolic acid, 1 to

20. Firm compression is then applied, and the limb is kept quiet for several days. Symptoms of local inflammation may be noticed, but they soon disappear. This treatment is designed to take the place of incision of the bursa.—*N. Y. Med. Journal*.

VENEREAL DISEASES.

Treatment of Phimosis without Operation.

In *The Practitioner* is an article by W. STEPHENSON RICHMOND, in which he presents an instrument for the treatment of phimosis by dilatation instead of by the cutting operation, which many patients utterly refuse to undergo. He notes the disadvantages of attempts to use dressing forceps or other improvised instruments, on account of the impossibility of introducing the blades into a close phimosis and the impossibility of exerting the pressure to advantage, even when the blades are successfully intro-

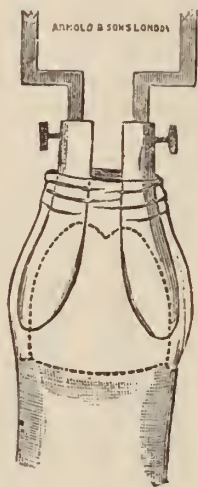


duced, on account of the constriction slipping up to the narrowest part of the forceps, viz., the joint, since the blades cannot be opened parallel to each other. He then lays down the following three

essentials for an instrument for this purpose, viz. : 1. It should be possible to introduce the blades separately. 2. They should open parallel to one another or at any angle. We fail to appreciate the necessity of opening at variable angles. 3. The blades must be of a suitable size and shape to suit the case.

He then gives figures of an instrument which he has devised and which are here reproduced.

It consists of two rods, A B, connected together by means of two long screws C D. At one extremity they are bent inwards and fixed to the blades E E, which can be removed, and may be of any size and shape. The rod B is of a tuning-



fork shape, with the screw-nut M sliding in the groove between the two branches of the fork. Through the nut M is passed the long screw C, the end of which is received into a cup working on a hinge joint attached to the cylinder K. The screw-end may be detached from the socket by pressing a little spring. The cylinder K slides along the bar A.

The blades are passed separately down between the foreskin and glans. Very small ones are used at first. They are then attached to the rods, which are

united by fixing the end of the screw-rod C into the cup-joint K. The screw-rod D, which is fixed only to the bar A by a joint, can be pulled over into the groove of B. Gradual extension can then be applied by turning the nuts M and N.

The instrument seems to us to be unnecessarily complicated. The springs marked H in the figure are awkward, and if needed at all would be made more convenient and neat by our American instrument makers. In the rod B we would have simply an oval fenestrum for the passage of C, with a thumb-screw nut only on the inside. At K we would have only an oblong mortise in A, with a tenon on the end of C. The arrangement for adjusting D we would leave as it is, except, of course, that the slit in B is comparatively short.

Gonorrhœa.

Dr. J. F. KINCHELOE, reports the following cases in *Kansas Med. Index* :

CASE I. Mr. T., a young man of about 20 years of age, called at my office to procure treatment for an acute attack of gonorrhœa.

I put him upon the following treatment, which had been recommended by Dr. Lloyd, of London, viz. : $\mathcal{R}$. Chloride zinc, gr. xii ; rain water, $\mathfrak{z}$ xii. M. S. Inject 4 times a day.

I instructed my patient to eat light diet ; keep bowels solvent by taking small doses of Epsom salts every morning, and drink following freely, viz. : $\mathcal{R}$. Flax seed, $\mathfrak{z}$ i ; boiling water, Oii. M. Let stand 2 hours, and when cool drink ad lib.

My patient was cured in one week.

CASES II. AND III. Mr. G. called at my office for treatment for himself and wife, stating that he had been troubled with gonorrhœa about two weeks, and his wife about one week. Treatment,

℞. Chloride zinc, gr. xvi; rain water, ℥ xviii. M. S. Inject 4 times a day.

I instructed that the diet should be light and bowels kept solvent with Epsom salts, and the penis and vulva be cleaned with castile soap-suds.

These cases made a good recovery in six days.

Transmission of Syphilis by the Hebraic Rite of Circumcision.

Dr. A. KEDOTOFF cites three cases of this character, in the first two of which mother and child both suffered from the infection. This operation has been so frequently described as to make it unnecessary to repeat it here, except to say that after the foreskin has been removed, the wound is sucked by an assistant. It is certain that if the psylle be syphilitic, the chances are very great for the contamination of the child, recognizing the frequency of buccal chancres.

In the three cases cited there was no question of hereditary syphilis, because in the first two the fathers were carefully examined, and showed no traces of the disease, and the other children were exempt. In the first two there were traces of the primary sore on the penis. If the hereditary influence be admitted, it is difficult to understand how the children could so infect their mothers. The operator being examined, was found to be perfectly healthy. The psylle (or the assistant whose business it was to suck the wounds) showed no blotches or cicatrices upon his body. The cervical, epitroclear and inguinal glands were slightly tumefied. No trace of syphilis on the genital organs or about the anus. But on the mucous membrane of the lower lip there was a curvilinear cicatrix passing to the gingival ridge, where there was a pearly spot, which was covered by thickened, whitish,

opaline epithelium. On the mucous membrane of the upper lip, there was a yellowish fissure, and on the gum opposite to it a little greyish spot, as if covered with false membrane, and which looked like a mucous patch; the tonsils were slightly injected. The psylle denied that he had had syphilis, and explained the presence of the cicatrix on the lip as due to a fall in childhood. One suspicious circumstance connected with the cases was, that the operator presented himself for examination without hesitation, while the psylle refused to come until brought by the police. A month later he was examined by two other physicians, who confirmed the presence of these symptoms, but were doubtful as to their origin. Dr. Kedotoff considers that the psylle contracted the disease less than five years before, possibly in another way than by coitus, and that the affection showed itself in a slight, benign form, which manifested itself, from time to time, as mucous patches—the form most apt to transmit infection. Moreover, it is this form which most frequently escapes attention.—*Ann. de Dermatol. et de Syphil.*, Vol. V., Nos. 9, 10.—*Jour. Am. Med. Ass.*

Bartholow on Spermatorrhœa.

In spermatorrhœa, of the pathological type, Prof. BARTHLOW gave, at the clinic: ℞. Extract ergotæ fluid, extract pilocarpî fluid, āā ℥ xv. M. Sig. Bis die, morning and night.

Also: ℞. Auri et sodii chloridi, gr. 1-20; extract nucis vomicæ, gr. 1-6. M. Sig. In pill, ter die.

Excellent results might also be obtained by passing an interrupted galvanic current through an insulated electrode placed in the urethra, the exposed part being in the prostatic urethra, the other electrode to be placed upon the perineum.—*Coll. and Clin. Record.*

DISEASES OF THE EYE AND EAR.

Treatment of Iritis.

The symptoms of iritis are very constant, no matter whether the affection be due to syphilis, rheumatism, or any other cause. The patients complain of orbital and periosteal pains; the cornea is injected; the coloration of the iris becomes altered; the membrane itself grows infiltrated and prominent, reacting but feebly to light; the pupil shows irregularities due to adhesions. Later the aqueous humor grows cloudy, and occasionally we observe minute grayish deposits on what is known as the membrane of Descemet. We then have to deal with the so-called punctuated keratitis (serous iritis).

The diagnosis having been established, our first therapeutic interference is to be directed toward complete dilatation of the pupil by atropine. If the action of the atropine instillation be not powerful enough, two drops of a five per cent. solution of cocaine seem to double the action of that alkaloid, as asserted by Dr. DAVIER (*Progrès Médicale*, April 4, 1885). If the pupil should nevertheless remain contracted and the corneal injection cause ecchymosis, leeches or cups applied to the temple are advised. The inunction of a belladonna ointment into the temples will be found useful in every case, regardless of its origin. Excessive pains call for injections of morphine or for chloral; warm compresses to the eyelids are an especially grateful application. These are the outlines of the general treatment of iritis when definite causative data are absent.

If a specific nature of the affection be either established or suspected, mercurial inunctions and iodide of potassium internally (30 grains daily) are to be insisted upon. In absence of any specific

taint, we can often detect a rheumatic element; then salicylate of sodium is to be exhibited. Additional relief will always be afforded by warm baths, dry frictions, and air-baths. Cases of tertiary syphilis presenting iritic symptoms will require the hypodermic employment of corrosive sublimate. In absence of all etiological indication in what is termed simple iritis, mercurial inunction and the iodide of potassium are still useful as interstitial absorbents. Therefore, if a rheumatic diathesis cannot be ascertained, the specific treatment is invariably to be resorted to first. An energetic and sufficiently long-continued treatment will usually prevent the chronic form of this affection, which of course implies grave troubles.—*Therap. Gazette.*

Cysticercus in the Vitreous.

DON PEDRO LAGLEYZE describes, in a Buenos Ayres medical journal, a case of cysticercus in the vitreous, this being the only recorded instance of an interocular entozoon occurring in the Argentine Republic. The patient was a man thirty-four years of age. Six months before his eye-trouble commenced he had passed a tape-worm. The first symptoms were pains in the supra orbital arch and flashes of light in the right eye, the power of vision of which rapidly deteriorated. A month after these symptoms commenced he noticed that the vision of the left eye was beginning to be impaired; he therefore consulted a medical man, who treated him for more than a year before he was admitted to the hospital at Bueno Ayres, under the care of Dr. Don Cleto Agiurre. There was no injection of either conjunctiva; pupils sluggish, vision much impaired. Left eye: fingers scarcely counted at fifteen centimetres, tension normal, atrophy of papilla. Right eye: an exten-

sive hiatus in the superior half of the field of vision, central vision one-seventh, tension greatly diminished. With the reflector a characteristic cysticercus was seen in the vitreous, with two suckers visible, but not the corona of hooklets; it was dead, but apparently had not been long so, for about a month afterward there was a considerable change, the head having become globular and the neck shrunken. The body, which had been translucent, and therefore appeared red by the transmission of rays from the fundus, was now opaque. The retina was detached at the point where the animal pierced it. The papilla was white, as in the left eye, this being not due to the entozoon, but merely a coincidence. The atrophy continued to increase in spite of remedies.—*The Lancet*.

Measurement of Refraction by the Shadow Test or Retinoscopy.

In an excellent article in the April number of the *American Journal of the Medical Sciences*, Dr. EDWARD JACKSON, of Philadelphia, traces the history of the shadow-test from its introduction ten years ago by Cuignet, of Lille, to the present time. He fully describes the optical basis of the test, and considers its application in the various states of refraction. It may be looked upon as the union and evolution of two modes of examination almost as old as the ophthalmoscope itself, namely the twirling of the mirror to detect conical cornea, and the examination of the myopic eye by the indirect method, without the intervention of an object lens.

Its advantages are that it is most widely applicable, has the certainty of an objective method, the accuracy of trials with test-lenses, and the rapidity of the optometer. It is applicable in

the cases of young children, the amblyopic and malingersers, in which subjective tests can not be used; and in cases where restlessness, nystagmus, hazy media, or the loss of the other eye, render accurate examination in the erect image by a refraction ophthalmoscope difficult or impossible. In certainty, when the patient retains the power of accommodation, it seems inferior to the "direct method" as a means of discovering and measuring latent hypermetropia. But it is superior to the direct method in the detection and estimation of astigmatism.

In accuracy, the test very nearly equals the subjective test with trial lenses, for patients who have good vision, good intelligence, and honesty; for patients lacking in any of these requisites for subjective testing, it is markedly more accurate than any other method. In all cases where the state of refraction is to be measured accurately, it effects a saving of time; in the stupid or sluggish the saving is very great.—*Louisville Medical News*.

Liniment for Earache.

Dr. CARLOS PAVESI recommends (*El Sentido Catolico en las Ciencias Medicas*) a liniment composed of camphorated chloral, 2 1-2 parts; pure glycerine, 16 1-2 parts, and oil of sweet almonds, 10 parts. This is to be well mixed and preserved in an hermetically closed bottle. A pledget of very soft cotton is to be soaked in the liniment and then introduced as far as possible into the affected ear, two applications being made daily. Frictions may also be made each day with the preparation behind the ear. It is claimed that the pain is almost immediately relieved, and even in many cases the inflammation is subdued.—*Midland Med. Miscel.*

DISEASES OF THE SKIN.

Antimonial Wine and Turpentine in Skin Diseases.

Dr. JOHN KENT SPENDER writes an article, which appears in the *Practitioner*, in which he advocates the use of antimonial wine in comparatively small and frequent doses for the treatment of some dermatic affections. He says that this drug (the tartrate of antimony) has the power of helping to stop the evolution of the inflammatory process anywhere—equally in solid glands and over free surfaces. He has employed the remedy he so ably advocates, in psoriasis with success and insists upon the small doses frequently administered. He finds that he gave in one case a few minims short of seven ounces of antimonial wine, equivalent to nearly fourteen grains of tartrate of antimony, in about seven weeks.

In the same journal Dr. H. Radcliffe Crocker states that he has used turpentine internally in psoriasis with good results. Over thirty cases were treated and in most of them no external treatment was used. He has also employed the same remedy in eczema, in those cases where no defect in the general health could be detected. Pityriasis rubra was distinctly improved by it and, as is well known, it is a useful remedy in purpura. He gives the following as being cases in which turpentine is contraindicated: children under five years of age; all who have unsound kidneys or irritable bladders; most cases in which dyspepsia is present, though in some instances it can be tolerated even by them; and gouty subjects, whose powers of elimination are seldom good.—*St. Louis Med. and Surg. Journal*.

Baths of Permanganate of Potassium.

Dr. HÜLLMANN, of Halle, first used this remedy in 1879, for a two-year-old child that was suffering with a scrofulous eruption—eczema and impetigo. After other means had been tried without benefit, he ordered a full bath of permanganate of potassium solution, so strong that the color of the water was between a dark rose and a violet. The child was kept in the bath until the water began to take on a brownish tint. After two weeks of this treatment the eruption entirely disappeared, leaving a slight yellow color to the skin, which disappeared in a few days. Since then Dr. Hüllmann has used it with success in the so-called scrofulous exanthemata, in prurigo and eczema, in intertrigo, and during the desquamative period of measles, scarlet fever, and varicella—with the latter, as a preventive against infection. He found it of most benefit when used after free washing and the use of the brush to remove all scales, scabs, and other accumulations. The proportion of the solution required is about grs. xv. to Qx. It is put into hot water, which is then allowed to cool in the bath tub.—*Archiv. für Kinderheilkunde*, B. VI., Hft. 3.—*Jour. of Amer. Med. Assoc.*

Chilblains.

The following is Hebra's prescription for chilblains:

R Cerat simp.,
Oleum olivæ aa - - - ̄ ij
Glycerine - - - - - 3 ij
Camphoræ tinct. - - - 3 j

Spread on strips of linen and wrap around the parts affected at night.—*Chicago Med. Times*.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Case of Compound Depressed Fracture of the Skull, with Wound of the Longitudinal Sinus; Trephining; also, Fracture of the Spinous Process of the Ninth Dorsal Vertebra; Recovery; Note on the Construction of the Trephine.

WM. BARTON HOPKINS, M.D., (*Annals of Surgery*) Surgeon to the Episcopal Hospital, Phila., Pa. :

William C., 32 years of age, of temperate habits, a brakeman by occupation, while putting down brakes from the roof of a freight car moving at the rate of thirty-five miles an hour,

slow, but not stertorous. There was no paralysis nor bleeding from the ears, nose or mouth. In addition to the head injury, presently to be described, there was discovered, while making a careful examination of his whole body for other injuries, a fracture of the spinous process of the ninth dorsal vertebra. On introducing the finger into a large wound of the scalp, an extensive area of depressed bone could be felt over the right parietal region.

A small quantity of ether was given, and the whole extent of fracture clearly exposed by dissecting up a large flap, including the tissues down to the bone which was turned down over the temple

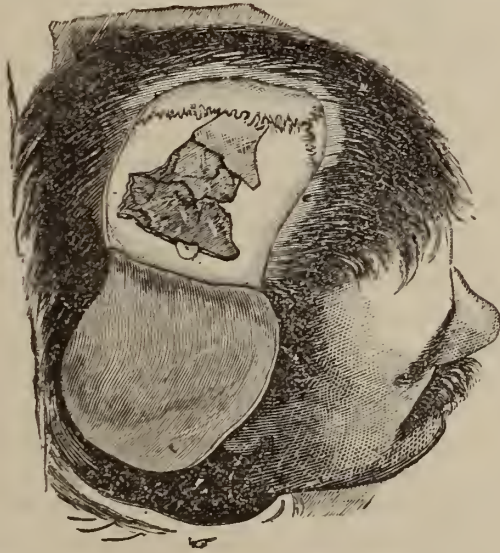


Fig. 1. Extensive Compound Depressed Fracture of Skull.

the chain below parted, and, as his whole support depended upon a stick which he had thrust through the brake wheel in order to get additional purchase, he was hurled to the ground. When brought to the hospital he was almost unconscious, though resisted and became restless if handled or teased. His face was pale and his pulse feeble. The pupils were contracted equally and moderately. Respiration was noisy and

and pinned in position. The exact location of the fracture has been clearly exhibited in the accompanying illustration by exaggerating the size of the flap. An irregular triangle of depressed bone, about 2 1-2 inches in its greatest length, was found to occupy principally the central portion of the right parietal bone. Its base was depressed the thickness of the skull, and was thrust far beneath the sound bone at the lower

portion of the wound ; while above, its apex extended to the parietal bone on the opposite side. Although much comminuted the fracture consisted chiefly of three fragments. Much care and diligence was required to elevate these, as they were very firmly locked into one another and nipped by the sound bone. It was necessary, however, to apply the crown of a trephine at only one point, that corresponding to the seat of greatest depression, where the fragment had been driven under the sound bone. Each fragment in turn, from below upwards, was elevated, and each, being found quite separated from its attachments beneath by clots of blood, was removed. Under and around the uppermost fragment were found the greatest evidences of hæmorrhage, and instantly it was elevated very free bleeding occurred. It was quickly lifted out, and the blood seen to escape from a circular wound in the longitudinal sinus about a sixteenth of an inch in diameter. This fragment, examined after its removal, was found to contain upon its under surface the Pacchionian depressions, and upon its upper border the dentations of the sagittal suture, one of these latter having probably caused the wound of the sinus. The hæmorrhage, although profuse, was so thoroughly in view that it could easily be controlled temporarily simply by the weight of a finger. Several efforts were made to apply a fine ligature about the wound, but they were unsuccessful, and the patient lost much blood during each attempt. A small compress of lint, dusted with iodoform, was lightly applied to the wound in the sinus, a single intervening layer of lint being placed next the wound to prevent the entrance of iodoform into the circulation. The dura mater was otherwise uninjured, and showed apparently

healthy pulsating brain matter beneath. The sharp edges of bone having been removed with gouge forceps, the wound was washed with carbolated water, loosely approximated with silver sutures and dressed with carbolized gauze dusted with iodoform.

The patient was a good deal blanched after the operation, but reacted well by evening, his temperature being $100\ 1-2^{\circ}$. During the night and for two days following he was excessively restless, two men being required constantly at his bedside to restrain him. The urine was drawn off by the catheter for three days, after which it was voided voluntarily. On the fifth day the dressing was removed for the first time, and the wound found to be in a healthy suppurative condition, with primary union of the incised portion of the flap. After this it was dressed every other day. The compress was removed from under the scalp on the seventh day without causing recurrence of hæmorrhage. On the following day there appeared a slight erysipelatous blush upon the right cheek, which, however, drove the temperature up only to 101° , and faded within forty-eight hours. The wound filled up rapidly with granulations, and steady improvement continued until recovery was complete.

His mental condition from the first return of consciousness, at the end of two days, was characterized at first by perfect imbecility. The restlessness had disappeared, and he would lie upon his right side, staring vacantly around him. He paid no attention to what was said to him, and indeed, showed no recognition of anything, except when winked at he would always wink in return. At the beginning of the second week intellection began to improve, when it was found that his memory was entirely gone. He had forgotten his

age, how many children he had and their names. This symptom persisted long after his mental condition was otherwise restored, eight weeks after the accident still being unable to remember all of the stations on the railroad where he was employed. He had no headache at any time, and seldom complained even of discomfort at the seat of injury. Small pieces of bone were several times removed, and an ulcer at the cicatrix still remained when he was discharged from the hospital. The fracture of the spinous process of the dorsal vertebra united slowly, but gave rise to no trouble.

He became an out-patient December 28, 1884.

Although the case, on account of the severity of the head injury, its favorable termination, and the somewhat unusual lesion of the spine, is worthy of record, the principal point of interest attached to the wound of the longitudinal sinus. The generally recognized fact, that if the hæmorrhage proceeds from a point which is clearly exposed to view, there is no immediate danger, was here well illustrated. Its permanent arrest by means of a compress, though accomplishing the object, did not give that feeling of confidence which would have been obtained had the attempt to apply a ligature succeeded. Efforts to do this, with tenacula and forceps, were persevered in a number of times, and were not abandoned until there was risk of fatal syncope from the loss of blood which accompanied each attempt. The cause of failure depended on the tense character of the edges of the opening in the sinus, which would not yield sufficiently to permit of the puckering necessary to its closure.

The patient had apparently lost a good deal of blood before his admission; he certainly lost much during the

operation; and to this cerebral depletion may properly be ascribed the very moderate character of the inflammation which followed.

A NOTE ON THE CONSTRUCTION OF THE TREPHINE.

Its Centre-point.—Several years ago, while substituting Dr. R. J. Levis in the wards of the Pennsylvania Hospital, I had occasion to trephine a boy eight years of age, for compound depressed fracture of the skull, and, from an incident which occurred during the operation, had reason to be strongly impressed with a fact which, although quite apparent, has not, perhaps, been sufficiently emphasized—namely, that the depth reached by the centre-point of a trephine is equivalent to the distance it projects beyond the level of the teeth, *plus the depth the teeth of the instrument are sunk before they engage.* With due allowance, as I thought, for the extreme thinness of the skull in a subject so young, I set the centre-point of a small trephine with a projection of about 1-32 of an inch, and directly the teeth engaged withdrew it. On lifting out the button of bone, it was found to have been penetrated by the centre-point. Although no damage had been done thereby to the dura mater, and the case progressed rapidly to recovery, I censured myself for the occurrence, especially as I had some time before constructed a model of an instrument designed to avoid this very risk. The modification, which is a slight one, and may be readily adapted to the ordinary instrument, has also for its object the absolute certainty of preventing penetration of the centre-point, through neglect to withdraw it at the proper time. It consists, as shown in the cut, of a cylindrical nut, armed with a minute point, which occupies the cavity of the crown, and is projected there-

from by a spiral spring contained in its centre. Its action is obvious. When applied to the part, the centre-point engages, but slight pressure causes it to

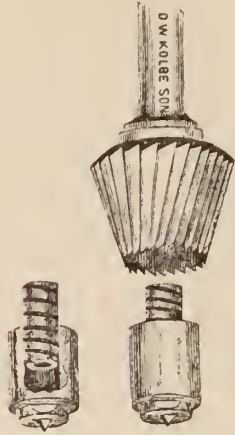


Fig. 2. Modified Trephine Centre-point.

recede and permits the teeth to cut, until the nut has been pressed home in the cavity of the crown, when the teeth refuse to cut further until the nut is dropped out. After this the operation is proceeded with in the ordinary manner.

Its Crown.—The object, as is well known, of the conical shape which has been wisely given to the modern instrument, is to make it act like a reamer and bury no deeper than it cuts. As many are constructed, however, this may give a false sense of security. In careful hands, no cone is needed. In others, a slight cone may be worse than none. Theoretically, a trephine with a conical crown will not slip after it has cut its way through the skull; but as even the most skillful manipulation fails to prevent all swaying to any instrument which is made to bore, the diameter of the circular orifice made in the skull by the trephine is greater than that of the crown, at the point it is cutting. The crown will, therefore, as soon as the resistance below ceases,

enter until its diameter coincides with that made in the bone. Therefore it would seem advisable that the crown should be always made with a decided cone, as the slight increase given thereby to the level of the cut through the bone can hardly be urged as an objection.

"Nasal Polyps."

Dr. CHARLES CHIARI, (*St. Louis Cour. of Medicine.*)

Diagnosis. Only when the polyps extend nearly or quite to the anterior nares can the diagnosis be made by simple inspection alone or conjoined with elevation of the point of the nose; however, a polyp extending down below the soft palate may be seen by depressing the tongue. In all other cases (and these are the great majority) rhinoscopy must be employed.

We see then, the nasal entrance being enlarged by means of the bivalve speculum with sufficient illumination from the reflector, mostly in the region of the middle turbinated bone grey, greyish-red, or light red, or ragged tumors which often extend to the inferior turbinated bone, or the entire lumen is filled with such growths. The diagnosis is easy when the polyps are decidedly grey and translucent and so little wedged in that they easily move in the current of air. Often they are, however, red, opaque like the rest of the mucous membrane. In this case we must call the sound to our aid; they prove themselves then soft, almost insensitive and easily displaced. If they are yet small and extend outward from the middle turbinated bone they may be completely concealed by this or the swollen inferior turbinated bone. In order to see them then it is necessary to press aside with a flat sound the membrane of the turbinated bones. Not

seldom polypi lying more posteriorly escape the eye looking into the nose from the front, either on account of the narrowness of the nose or swelling of the membranes. In these cases posterior rhinoscopy comes into use, which one must besides use in order to ascertain whether in the choanæ or pharyngeal vault other new formations may not be concealed. Another expedient is the use of Zaufal's speculum, although on account of the smallness of the field of view an accurate diagnosis by this method is difficult.

Finally, one can introduce the finger by the mouth into the pharynx if the patient under examination, on account of too great sensitiveness, cannot endure the posterior rhinoscopy. With some practice, however, it is easy by this means to touch the septum and the posterior turbinated bone and so detect a polyp of any size. In all cases we must seek to discover the seat of attachment of every polyp and the length and thickness of its pedicle, although from the above mentioned reasons we can with even more difficulty see the place of origin than the tumor itself. This knowledge will in any case render the operation much easier.

Differential Diagnosis. 1. Unusually prominent portions of the middle turbinated bone may be mistaken for polyps, especially if their mucous membrane is pale or greyish. Touching them with the sound, however, reveals a hard, immovable, sensitive body.

2. Cartilaginous or bony excrescences or decided curvature of the septum are in the same way by hardness and immovability sufficiently characterized.

3. Swellings of the corpora Zuckerkandli of the inferior turbinated bone, especially on its anterior and posterior extremity, are often grey, almost translucent, soft, movable and but little

sensitive. They have, however, an important diagnostic sign: they are retractile and change their volume often in a short time.

4. On the inferior and middle turbinated bones appear often circumscribed or more diffuse hypertrophies of the mucous membrane, which are not unfrequently pale, and resemble polyps on account of their insensibility and softness, and which, as above stated, may indeed, especially on the middle turbinated bone, result in the same.

5. Hopmann, in Cologne, has described under the name papilloma, broad-based, often translucent tumors with papillated surfaces, which extend exclusively from the inferior turbinated bone and are supplied with large glands and hyperemic vessels. They are mostly small.

6. Fibromata and fibro-sarcomata occur frequently with very numerous and enlarged vessels in the posterior part of the nose and the naso-pharyngeal space. They are known under the name of the naso-pharyngeal polyps, and arise mostly from the perosteum of the base of the skull, the os basillare and pterygoid process and are broad-based. (However some cases of pedicellated fibromata of the posterior turbinated bones are known.—Stork.) Their surface is smooth or roughened, their consistence hard. On account of their richness in vessels they bleed very easily and thereby endanger life; on this account and because of their unlimited growth (they penetrate often into the cranial cavity) they belong to the malignant tumors. According to Nelaton they appear only at the time of puberty in males.

Besides fibromata of the sphenopalatine fossa occasionally grow into the naso-pharynx and nose, whence they may again extend toward the orbits.

All these considerations make the separation from nasal polyps easy.

7. Adenoid vegetations in the naso-pharynx arise from hypertrophy of Luschka's tonsil, and appear as soft red, pin, or finger-shaped processes depending from the base of the skull, or as flat swellings and elevations from the region of Rosenmüller's fossa. They may block more or less the choanæ, render the entrance to the Eustachian tube impassible and so produce occlusion of the nose and impair hearing. They occur in youth. Their diagnosis is easily made by posterior rhinoscopy, since we find the choanæ entirely or partially blocked up by rough red masses or projections. Not seldom it is possible when the nose is not altogether too narrow, to see them from the front, especially during the act of phonation and swallowing, since they are thereby raised through the elevation of the soft palates.

Finally the finger introduced into the naso-pharynx can feel them as soft, wormy structures, which surround it from all sides and which must first be pushed aside to touch the septum of the choanæ. They are benignant and do not recur. Michel observed this affection 94 times in about 335 cases of nasal troubles.

8. Sarcomata and carcinomata of the nasal cavity are in the beginning of their development often papillated, and soon make themselves noticed through their tendency to bleeding and ulceration. In later stages the latter show a great tendency toward infecting the neighboring lymphatics, and both toward quick growth with decided deformity of the bony portion of the nose, and toward extension into the neighboring portions of the face. Even before this not infrequently a net-work of vessels appears in the skin of the nose, which is always

a bad sign. At last, as with all malignant tumors, the sanies and great loss of blood produce cachexia. After what has been said the differential diagnosis can be difficult only in case of soft, small, not yet ulcerated swellings. In such cases the histological examination of a small excised portion will help us.

9. Certainly cerebral hernias (encephalocoele and meningocele) may force themselves into the local cavity through a defect in the bone, between the ethmoid and frontal bones, and it is conceivable that they might be taken for polyps. Now since every operation on such cerebral hernias, indeed, even a simple puncture is generally followed by fatal meningitis, must at least consider the possibility of such an event. Fortunately these formations are very infrequent and almost always recognizable. The considerations which are to be taken into account in their diagnosis are the following:

They are congenital; at their upper extremity can be clearly felt the defect in the bone, and often their contents are somewhat reducible; by pressure upon them we can occasionally cause cerebral disturbances, as dizziness, fainting, convulsions, etc.

10. The discrimination of polyps from retro-pharyngeal abscess, exostosis and tumor of the soft palate can scarcely ever cause difficulty, so that it will suffice merely to mention these affections, which may occasionally occlude the nose.

The prognosis of mucous polyps as to life is to be held decidedly favorable; on the other hand, the prospect of permanent cure on account of their great tendency to return, will be very small and dependent essentially on the exact completion of the operation. Concerning the remaining forms of tumors, the naso-pharyngeal polyps, the sarcomata

carcinomata from their malignancy offer a decidedly unfavorable prognosis, while for the papillomata and adenoid vegetations a permanent cure may be promised,

Abscess of the Liver.

In a paper read before the New York State Medical Association, and published in the *New York Medical Journal*, Dr. JANEWAY says abscess of the liver is more common in this country than is generally supposed. The symptoms are frequently misleading, and good clinical observers often fail to detect its presence. Within the past year seven cases have come under my notice. In summing up attention is drawn to the following points in reference to the subject:

1. Abscesses of the liver can practically be divided into those affecting the left lobe, or the lower part of the right lobe, so that the abscess, when formed, produces an elastic or fluctuating tumor below the free borders of the ribs, and of those situated in the upper or posterior portion of the right lobe. The reason for this division is that abscesses in the two former situations are easy of access, of diagnosis, and of operative interference. The abscess in the last mentioned situation is the one which more often gives rise to difficulty in diagnosis, or, if diagnosed, to doubt as to the best and safest methods of interference.

2. There are several methods by which the existence or non-existence of adhesions between the liver and abdominal wall can be made out. The presence of hepatic friction, audible or tactile, shows the absence of adhesions, but the probability that they will soon be formed. If, on palpation, the edge of the liver remains fixed, and does not descend with respiration, adhesions have, in all

probability taken place. Again, a long needle—that of a hypodermic syringe or aspirator—introduced into the liver will, if the outer end is left projecting some distance, move upward as the liver descends, and downward as the liver ascends, if no adhesion exist. But if these have formed, then the needle does not move.

3. The difficulties which arise in the diagnosis of liver abscess may, in many cases, be surmounted by a careful survey of the history of the condition of the liver, and by exclusion of the existence of sufficient disease in other organs to account for the symptoms.

The mistakes which I have seen made have been: *a.* To consider a liver abscess some other disease, as malarial fever (remittent and intermittent), typhoid fever, or tuberculosis. *b.* To consider an abscess of the liver some other disease of the liver, as hydatids, cancer, congestion, fatty liver, hyperplasia. *c.* To consider the swollen liver an aneurism of the aorta, especially in case of abscess of the left lobe of the liver, where pulsation was communicated to it by the aorta. *d.* To consider an abscess of the gall-bladder an abscess of the liver, and *vice versa*. *e.* To consider a supra-hepatic abscess an abscess of the liver. *f.* To consider an abscess of the liver one of the abdominal wall, and *vice versa*.

Some years since the writer had supposed that a distinction could be made between liver abscess and cancer of the liver by careful attention to the patient's temperature; but subsequent investigation has shown that in cases of rapidly growing or disseminating cancers a hectic type of temperature may exist.

4. As regards the etiology of liver abscess, I believe that many of the apparently idiopathic are of traumatic origin. I have, in several instances,

ascertained its occurrence in persons who were in the habit of lifting heavy weights, particularly those who did so in hot places, as firemen, those unloading vessels, etc., by placing the right elbow firmly against the side, and then having the weight raised in this way. By this statement I do not mean to deny the probable influence of bacteria in the origination of abscesses, but to attribute to traumatism the establishment of that favorable condition which will allow of abscess formation.

In concluding, I may add to this paper, which is intended to present the subject in a practical manner, and as it has occurred to the writer, a few remarks on treatment. I believe that all accessible abscesses associated with an adherent liver are best dealt with by free incision, washing out with an antiseptic fluid, the introduction of a draining tube, and by antiseptic dressing.

The use of the abdominal bandage is sufficiently manifest as a means of preventing motion of the liver, and of holding it fixed, and needs no special comment. The medical treatment must be symptomatic. The writer believes that rest, a cool climate, and maintenance of the nutrition and strength of the patient, are the main ends to be attained. The most important point is to secure an early and safe exit for the pus.

Cocaine in the Extraction of a Needle from the Foot.

Mr. SAMUEL NALL reports a case in the *British Med. Jour.*, in which a fragment of a needle, lying about a quarter of an inch beneath the surface of the foot, was easily and painlessly extracted after the application of a four per cent. solution of cocaine.—*Jour. Amer. Med. Assoc.*

The Elastic Bandage in Strangulated Hernia.

The elastic bandage is so decided an improvement on the old-fashioned truss, and is so simple a contrivance in itself, that it is a matter of surprise that its palpable advantages should not have been recognized sooner. Though preferable to the truss in every form of hernia, it is especially in the strangulated form that the bandage renders priceless services. JAKOWLEW regards the application of the elastic bandage—next to an operation—as the most effective method of eliminating an incarcerated hernia, and speaks with confidence of its usefulness, even after the failure of taxis (*Centralblatt für Chirurgie*, No. 11, 1885). According to this author there are various modes of origin of an incarcerated hernia, as can be seen in herniotomy or in an autopsy. Each origin, as far as it can be ascertained, will, of course, call for a special form of taxis, but the bandage will be equally useful in all cases. The permanent, mild and uniform pressure of the bandage on the intestinal loop mostly results in either pushing the intestinal contents backward into the afferent or onward into the efferent portion of the loop, removing the strangulation in either case. Experiments on the cadaver have amply proven these results. The danger of gangrene is to be cautiously guarded against; persistent, violent, or even considerable pain is sufficient cause to discontinue the bandage. If, after the use of this bandage for ten to twelve hours, no symptoms of improvement appear, the uselessness of this treatment must be acknowledged, and other means resorted to. Jakowlew reports the successful employment of the bandage in five cases out of six, though in some cases grave symptoms and failure of taxis had preceded.—*Therapeutie Gaz.*

Recent Fracture of the Patella Treated by Suture of the Fragments.

In conjunction with notes we have previously given on the wire suture of transverse fracture of the patella, we offer the following taken from the *British Medical Journal*. The subject is of the greatest importance when we consider the wretched results almost uniformly obtained by all other methods. It will be remembered that the advice given heretofore has been to allow a certain time, several weeks, to elapse before performing the operation. This certainly must be the safer plan, but the subjoined shows that there need be no delay.

A man, aged 58, having been admitted into the Liege Hospital, for a transverse fracture of the patella with considerable displacement of the fragments and abundant effusion into the joint, Professor von Winiwarter decided to perform the operation on the day following the accident. A longitudinal incision was made into the joint, and it was then seen that the space between the fragments was occupied by hard adherent clots, which had to be carefully removed. The joint was washed out with a two and one-half per cent. solution of carbolic acid, and the fragments united by two wire sutures. A drainage-tube having been passed through small openings on both sides of the patella, the wound was dressed antiseptically, and the limb placed in a plaster-of-Paris splint. No accident followed the operation, and on the seventeenth day the patient was able to walk about with crutches. The wound had healed by first intention, and the wire sutures had become encysted. Professor von Winiwarter thinks that in young people fracture of the patella with moderate displacement of the fragments are to be treated by the ordinary means, but that,

under less favorable circumstances, there is great advantage in uniting the fragments by wire sutures.—*Weekly Med. Review*.

The Treatment of Fractures by Laminated Zinc Apparatus.

Dr. MAURICE POLLOSSON has been using, for some time past, in the treatment of fractures of the leg and thigh, an apparatus made of laminated zinc, having seen it applied in the Parisian hospitals by M. Raoult-Deslongchamps, the inventor. In constructing the apparatus for fractures of the leg, he cuts out of a sheet of zinc, by a paper pattern, a metallic plate intended to be curved in of a gutter shape, and adapted to the posterior surface of the fractured limb. The foot is supported by a sole, which is made by the curving in of the two sides of the plate; these two sides are fixed by iron wire passed through three holes pierced in the zinc and corresponding to the superimposed portions. The heel is received in an opening. A second plate of zinc, rectangular in form, and about 30 cm. long by 25 cm. broad, is then cut so as to be applied to the anterior surface of the limb. Besides the large and small plates of zinc, there should be three solid lacets of braided tape, and provided at one end with a strap buckle; two bands of webbing, and wadding for lining the interior of the plates. The laminated zinc can be obtained of any worker in such material, and the whole apparatus costs but very little.

Its application is made by lining the posterior splint with two layers of wadding where it covers the tendo Achillis one layer in the part corresponding with the popliteal space, and one layer covering the whole of the interior of the splint. The splint is slipped under the fractured limb, reduction is then made

with the sole of the foot placed against the sole of the apparatus, the limb being fixed provisionally in position with the aid of two lacets which compress the leg portion of the splint. The two bandages of webbing are then applied; one fixes the foot by a figure-of-eight crossed over the instep, the other is applied circularly about the knee and inferior portion of the thigh. To prevent the latter bandage from slipping up, the upper extremity of the zinc plate has digitations cut into it which are curved in to catch the bandage. This being done, the provisional lacets are removed and the second plate is placed on the anterior surface of the limb, which, when curved in, embraces the first plate in its concavity. The three lacets are then bound around it, one in the middle, the others at either end. The ultimate treatment consists in tightening the lacets frequently, which should always be drawn to their maximum, and in reapplying the bandages if they become relaxed.

From the time of its application the patient can rest the limb on a chair or sofa, without being obliged to assume a fixed position. The anterior splint can be removed, if necessary, from time to time to examine the parts. If there be much displacement, little cushions of wadding can be placed upon the posterior splint, so as to press upon the prominence of fragments in a gentle and constant manner, which is quite supportable and very efficacious. In complicated fractures the antiseptic dressings are placed under the anterior splint, and the posterior splint can be hollowed or sloped out at the level of the wound when it is necessary.--*Lyon Medical.-- Jour. Amer. Med. Assoc.*

Parker: Ununited Fracture of the Tibia; Amputation after Failure of other Modes of Treatment.

(*Medical Times*.) A boy of five came into the hospital seven months after a fall down stairs. No injury was noticed at the time and nothing in his gait "until some weeks later," when he began to limp, and the case went the rounds of several dispensaries before it was discovered that there was deformity with slight mobility at the lower part of the tibia, and some pain. Plaster-of-paris was kept applied up to the knee for six months with no sign of union at the end of that period. Electricity was used (induced current) by means of needles applied directly to the seat of fracture; the ends of the bones had been rubbed together on two occasions; both were of no avail. Then the ends of the bone were resected and the ends wired, ivory pegs being driven in above the suture. It was thought at first that some union had taken place, but although treatment was kept up faithfully, eight months after the operation he was about in the same condition as on admission. Eighteen months after the first operation resection was repeated with great care. There was no callus. Ivory pegs were driven into the bones and the fragments approximated by carbolized silk twisted like a figure 8. There was no attempt at union, and three months later the leg was amputated; this was about four years after the original injury.

No trace of new bone was discoverable in the specimen. The upper fragment tapered like a lead pencil; it was connected with the other fragment by fibrous material. The muscles were pale, but not fatty; the fibula presented almost an identical condition.

Mr. Parker remarks on the case, that during ten years only three cases of un-

united fracture had come under observation in the institution (East London Hospital for Children). One was lost sight of; one is slowly progressing, it is believed, toward recovery. The case related is the third. It was disappointing, the author states, to be obliged to amputate, even after the failure of milder measures. The limb was of no service, but an actual hindrance to locomotion. He could bear no weight upon it, even when wearing a well-moulded leather splint. The original injury was a slight one. The exact pathological condition which prevented an apparently intraperiosteal fracture from uniting, it is not easy to guess aright. There was very little callus thrown out at any time. It could not be ascertained whether any injury to the vascular or nervous supply of the bone had occurred; nor is it possible to say how much damage was done to the periosteum.—*Arch. Pediatrics.*

A Simple, Efficient Method of Treating Fractures of the Clavicle.

S. J. ALLEN, M. D. Cut a strip of surgeon's adhesive plaster, eighteen inches long and two and a half inches wide. Fold the strip of plaster, *sticky* side out, so as to make a compress-pad of equal dimensions. Then cut two other strips three inches wide, each, and two feet long—longer or shorter, according to the size of the patient. Raise the shoulder up and back, so as to bring the fragments in apposition. Have an assistant hold the shoulder immovable in this position, whilst the surgeon applies the dressing. Place the compress on the site of the fracture. The heat of the skin will make the compress-pad adhere, whilst the surgeon applies the rest of the dressing. First apply one of the strips of plaster, commencing on the front of the thorax, so

that the part that goes over the shoulder shall be equidistant from each end, and continuing it down the back part of the chest, drawing it taut enough to hold the fragments firmly in apposition. Then apply the other strips in the same manner, but in such relation to the first strip that it shall cross it obliquely directly over the compress. The adhesive plaster compress or pad, folded sticky side out, and applied to the seat of fracture, and held firmly in place by the strips, as above directed, becomes, so to speak, an element in the anatomy of the parts. The compress adheres firmly to the part to which it is applied, and is absolutely immovable; the dressing holding the fractured fragments accurately in apposition long enough to secure union without deformity.

This method is equally successful in the treatment of dislocation of the clavicle and fracture of the acromion process.—*Annals of Surgery.*

The "Hammock" Mode of Applying the Plaster Jacket.

Dr. A. B. HIRSH, *Med. and Sur. Reporter*. These thoughts were suggested by seeing Professor Nancrede recently apply a plaster jacket at St. Christopher's Hospital, before his polyclinic class. A poorly nourished Irish lad, aged some eight years, had the corset applied for a posterior dorso-lumbar curvature, although the doctor explained that any and every variety of spinal deformity could be treated by a modification of the same method.

A piece of ordinary "ten-ounce bur-lap"—the bagging used to wrap around rolls of carpet, etc.—some seven feet in length and three feet in width, was suspended between the two sides of the room. Each end of the canvas has a "casing" about one and one-half inches wide, strongly sewn, and a rope drawn

through the space thus made (so as to "bunch" the end), which is then attached to a heavy hook or ring screwed into the wall with a compound pulley and rope to render taught the swing; here we have the convenient hammock as required.

The lad, devoid of clothes, except a woolen undervest, was next placed therein, face downwards and with hands and feet extended—the former grasping the sides of the hammock, so as to exercise some extension—and a hole was cut through the bottom of the swing opposite to the nose and mouth, so as to allow him to breathe easily. Care was taken to fit the usual abdominal pad, and to keep the hammock well balanced. The hammock was then cut transversely on a level and down to the iliac crests; the same was done at the upper margins of each axilla. The flaps thus formed were folded around the body, the surplus portion removed, and the whole roughly sewn up, thus forming a second undervest around the woolen one. Starting from above, the bandage was now carried around the body until the deformity was completely covered, the canvas being, of course, included in the turns. The plaster was allowed to set, and the patient relieved from his swing by cutting loose the burlap above and below the jacket, and the procedure was complete. At no time was discomfort complained of, as the little one even joked about the novelty of his situation.

The professor proceeded to explain that this hammock achieved all the good that Sayre's swing did, and obviated all its objectionable features. On the latter, the curves above and below the gibbosity were straightened out, as well as any lateral deviation, and thus the apparent increase in height was obtained, while the weight of the body, by a true

process of leverage, effected through the over-curved portions of the spine, above and below, theoretically tended to separate the softened and diseased anterior surfaces of the vertebral bodies. Whether this latter result was desirable, if obtainable to a marked degree, was more than doubtful in the lecturer's mind, as he thought all that should be aimed at was to remove the weight of the trunk, head and upper extremities—one or all, according to the portion of the diseased vertebræ—and to place the column in the best position attainable, for ankylosis and future usefulness. In the same way, the prone position in the hammock effaced the curves, and, by leverage, tended to separate the anterior surfaces of the vertebral bodies. The degree to which the hammock was allowed to "sag" would determine the amount of extension exerted upon the spine.

This method was cheap, comfortable and *always* available, without any special apparatus beyond bagging, ropes, and strong screw-hooks, staples, or some similar contrivance. The patient might be allowed to swing for hours until the plaster was perfectly dry, thus obviating the risk of cracking of the jacket, which sometimes happens when the patient is, perforce, taken down too soon from Sayre's swing, on account of fainting, etc., as the professor had experienced in his own practice. The screaming, struggling, and terror, so common with children, is all done away with. It is the part of wisdom to place a mattress on the floor beneath the hammock, lest any part of the apparatus break and a serious fall result. The professor now always resorted to this method of applying the jacket, and was perfectly satisfied with it.

The Treatment of Wounds.

At a recent meeting of the Sheffield (England) Medico Chirurgical Society, Mr. GARRARD read a paper on this subject, in which he said that he thought we owed a debt of gratitude to Sir Joseph Lister, whether we adopted his treatment of wounds or not, for he had been the means of bringing home to every surgeon the importance of personal attention to every detail of dressing, as well as absolute cleanliness, thus making it possible for the humblest provincial surgeon to obtain results equal to those of the most eminent, except in such cases as opening large joints and deep cavities, as empyema, psoas and other deep abscesses connected with carious bone. He did not adopt his method in all its details, believing that as good results were obtained by simple means. In amputations and other large wounds, he washed them first with hot iodine water, as recommended by Mr. Bryant, and then dressed with dry absorbent cotton, drainage, when necessary, and gentle elastic pressure, keeping the wound always dry. He considered the absorbent cotton impregnated with salicylic acid was much better than the favorite guaze, which was not sufficiently absorbent to keep the wound dry. Taking the last seventy-nine cases at the Rotherham Hospital, and excluding four who died in a few hours from very severe injuries, requiring double amputation, there were four deaths. One was an old man, who had both legs amputated for severe injury, and died on the fifteenth day; another on the sixth day, after herniotomy, the hernia having been strangulated eight days before admission; the bowel sloughed. Neither of the two other cases died from blood-poisoning. For the arrest of hæmorrhage, Mr. Garrard, whilst admitting that the catgut ligature was an excellent

method, much preferred torsion, which he always adopted, believing it to be the simplest, the nearest approach to nature's own method, and not liable to be followed by secondary hæmorrhage. He had never seen an artery bleed again after having been once properly twisted, and had never had to re-open a wound on that account.—*Med. and Surg. Reporter.*

The Production of Phantom Tumor.

The *London Medical Times*, says that Dr. KRUKENBERG, of Bonn, contributes to the *Archiv. für Gynäkologie* (Band xxiii., Heft 1,) an article on this subject. In a case of the kind under his own care—a case, that is, of apparent enlargement of the abdomen which disappeared entirely when the patient was anæsthetized—he examined the patient very carefully to find out how the swelling of the abdomen was produced. He came to the conclusion that it was due to lordosis of the vertebral column, this lordosis being dependent upon weakness of the spinal muscles due to anæmia and debility. By the lordosis, he thinks, the space in the abdominal cavity is lessened, hence the pressure within it raised, and the anterior abdominal wall thrust forward by the pressure of its contents. Acting upon this theory of the disease, Dr. Krukenberg treated the patient by keeping her at rest, with pillows, etc., so arranged as to support the pelvis, and thus counteract the lordosis; and under this treatment the abdominal protuberance disappeared. He candidly admits that his theory does not account for the persistence of the apparent tumor in such cases where the patient is lying down, unless hysterical contraction of muscles be assumed; nor, we may add, does he explain why similar phantom tumors are not a regular accom-

paniment of the lordosis due to progressive muscular atrophy, a condition which suggested to him the theory that weakness of the spinal muscles was the cause of the disease in his case.—*Med. and Surg. Reporter*.

An Anæsthetic Mixture of Dimethylacetal and Chloroform.

Two volumes of the former to one of the latter, has been used at the Strassburg surgical clinic in a hundred and fifty cases. Fischer ("Dtsch. Ztschr. f. Chir.,"; "Ctrlbl. f. Chir.") says that its advantages are that psychical excitement and muscular agitation do not occur, but the patients pass gradually into a quiet sleep; that vomiting, and efforts at vomiting, are not observed during the anæsthesia, and occurred after consciousness was regained in only four cases (those of very anæmic patients who had been allowed to drink a good deal after the operation); and that the disappearance of the anæsthesia is very rapid, and leaves the patient feeling comfortable, without any headache. The mixture is recommended: 1. When gastric catarrh and vomiting are especially to be avoided. 2. For laparotomy. 3. In cases of heart disease. 4. In nephritis. 5. In diseases of the central nervous system, particularly infantile paralysis and epilepsy. 6. In cases in which untoward symptoms come on during chloroform anæsthesia and the operation can be completed only with the aid of an anæsthetic. The drawbacks are the slowness with which anæsthesia is induced in robust, muscular individuals, and the high price of dimethylacetal.—*N. Y. Med. Jour.*

A Lotion for Severe Contusions.

Dr. HEWSON, who has had large experience among the lumbermen of Texas,

writes to the *Medical Times* that he has found the following lotion an excellent application in cases of severe contusion: ℞. Sodii hyposulphitis, $\bar{\text{z}}$ jv.; acidi carbolicæ cryst., $\bar{\text{z}}$ ss.; glycerini, $\bar{\text{z}}$ ij.; aquæ, O j. M. A cloth well saturated with the lotion should be kept in constant contact with the parts.—*Med. Age*.

Iodoform Solution for Parenchymatous Injection.

℞. Iodoformi, 1 gr.; benzol, 9 grs.; ol. vaselini, 11 grs.; ol. gaultheriæ, 2 drops. M. For injections into goitre and non-caseous lymphatic glands, as advised by Mosetig.—*Revue de Therapeutique*.—*Med. Med. Jour.*

VENEREAL DISEASES.

Cancer in Syphilitic Subjects.

This question has been taken up by Dr. OZENNE, *Four. de Méd. et de Chirur.*, Sept., 1884, who deals with it exhaustively in a recent volume, referring especially to syphilitic cancer of the mouth. This latter is a hybrid disorder arising from the united action of syphilis and cancer. The former disease, when thus associated, is always tertiary; its prior stages have never been observed in direct connection with cancer. The combined lesions of cancer and syphilis, when affecting the buccal cavity, are of several kinds, among which our author distinguishes three in particular—the cancro-sclerous, the cancro-gummatous, and the cancro-sclero-gummatous varieties.

(a) In the cancro-sclerous form, the cancer under its usual aspect is sometimes the first to be manifested; sometimes, though more rarely, it is preceded by the syphilitic lesion; and, after a certain interval, we are confronted by a sort of mongrel condition, compounded

of the products of incipient cancer, and the changes due to the sclerous glossitis. The appearance of the tongue is then as follows: the organ is enlarged, and displays the cancerous formation. If this be superficial, as a hard swelling, irregularly shaped, of variable size, and more or less prominent; if the epithelioma be interstitial, the tumor is sub-mucous, resistant, elastic, and seated upon an indurated base of undefined dimensions. In the neighborhood of the cancer are observed either the lesions of the superficial sclerous glossitis—smooth, shining, slightly reddened indurations, circumscribed, or co-extensive with the mucous membrane—or, more frequently, all the evidences of a dermo-parenchymatous glossitis, which hardness is diffuse and downward-reaching, so as to impart a peculiar sensation to the examining finger.

We cannot here delineate the affection in all its aspects. M. Ozenne places them under four classes, which he distinguishes according to the manner in which the hybrid structure is developed, *i. e.*, without ulceration; with a dermic sclerosis resembling psoriasis; with superficial ulcers of the mucous membrane, or with cancerous ulceration properly so-called.

(b) In the second form—the cancerogummatous—the lesions are so closely united that the features peculiar to each of them are almost entirely effaced; we have an excavated ulcer with an indurated base like that of a cancer, but without the perpendicular walls or bleeding surface characteristic of the latter. Sometimes, also, other ulcers are found in the vicinity.

(c) The third or cancero-sclero-gummatous variety is the most complex; it combines the gumma, the cancer, and the dermo-parenchymatous sclerosis in very various proportions, sometimes

manifesting one of these components quite distinctly, and sometimes blending them in utter confusion—thus presenting an exceedingly diversified appearance.

Such are the distinguishing marks of syphilitic cancer of the mouth—marks which are reproduced when the lesion is situated on the tonsil, the cheek or the lips. As to its functional symptoms, these consist almost wholly in a diminution of the disturbances caused by either of the diatheses when alone present. Thus, hemorrhage is seldom met with, and pain, so frequent an accompaniment of uncomplicated cancer, is generally absent. Despite these advantages, the termination is no less fatal; since, as M. Verneuil has remarked, the prognosis depends upon that of the predominant neoplasm, and this, in the dual affection we are speaking of, is always cancerous. Treatment with iodine should always be resorted to when the existence of a syphilitic cancer is apprehended, as being undoubtedly applicable to the specific element in the disease, but should not be kept up too long, for fear of affecting the cancer. The latter is sometimes amenable to surgery. But it must be borne in mind that mercury, so injurious in ordinary buccal cancer, is here also to be absolutely proscribed.

M. Ozenne concludes by citing several cases of syphilitic cancer affecting the nipple, the penis, the testicles, etc.—*Journal of Cutaneous and Venereal Diseases*.

DISEASES OF THE SKIN.

Oleate of Copper in Tinea Capitis.

Dr. ROBERT BOAL (*Peoria Med. Monthly*): Last year I was called to see a patient, 17 years of age, well formed, robust, and in apparent good health. I

found the entire scalp covered with large, branny scabs, from beneath which a discharge had issued which became hardened by the contact of the air, the hairs were broken off, and looked like stubble. They had lost their glistening appearance, were dry and apparently dead. The eruption not only covered the entire scalp, but extended down to the upper side of the face, and over the ears. It was one of the worst and most unpromising cases I ever saw. Nearly all of the ordinary germicides had been tried without avail, under other hands. I determined to use the oleate of copper. An ointment of cosmoline containing 20 per cent. of the oleate was applied twice a day, having previously gently removed all the detached and partially detached branny scabs with a hair brush. Under this treatment the case began to improve, and at the end of three weeks the scalp assumed a healthy appearance, the hair grew rapidly, and the disease was cured. More than a year has elapsed since that time and there is no return of the disease. The oleic acid with which the copper is combined, seems to have the power to penetrate to the depth of the hair follicles, laden with the copper, a combination which effectually destroys the parasite.

No constitutional treatment was used or required. The ointment should be well but gently rubbed upon the parts, once or twice a day, as required. In most cases an ointment containing from 10 to 15 per cent. of the oleate of copper will be strong enough. In my opinion this is one of the most efficient remedies we possess in this troublesome and disagreeable affection. I shall use it in the future as in the past, with more confidence than any other remedy, and I do not hesitate to recommend a trial of it to others.

Treatment of Eczema.

Dr. J. M. MOSENA writes to *Med. World* as follows: I am treating a case of eczema in a child six months old. The child is very fleshy, and otherwise the picture of health. Three weeks ago, when the child was first brought to me, I found it in a terrible condition. The face, head, neck, and a number of places on the body were a literal mass of seeping, scabby sores, with terrible itching spells. My treatment is as follows: *R.* Syr. stillingia, $\bar{\text{z}}$ ij.; syr. sarsap. comp., $\bar{\text{z}}$ iv.; potass. iodidi, grs. xvj. *M.* Sig. One-fourth of a teaspoonful four times a day and continued for ten days. Then give Fowler's solution, two drops two to three times in twenty-four hours. Then give the first prescription again, etc. For external use: *R.* Cosmoline, $\bar{\text{z}}$ iv.; hydrarg. oxid. rub., $\bar{\text{z}}$ ss.; bal. copaibæ, fl. $\bar{\text{z}}$ ss.; ol. sassafras, gtt. xx.; acidi. boracici. pulv., $\bar{\text{z}}$ j.; ext. hydrastis, fl. $\bar{\text{z}}$ j. *Ft.* ung. *Sig.* Apply twice a day over entire body.

A Formula for Ringworm.

Dr. HENRY BROWNE gives us in the *Brit. Med. Jour.* the following: *R.* Sodæ hyposulphitis, $\bar{\text{z}}$ j; solve in aqua fl. $\bar{\text{z}}$ viij; et adde acidi hydrochlorici, fl. $\bar{\text{z}}$ j. The use of this lotion, as a water-dressing, covered with oiled silk, and accompanied by daily washing in soft soap and water, has proved satisfactory.—*Med. & Surg. Rep.*

Herpes Zoster Treated by Salicylate of Sodium.

Dr. DUBOUSQUET-LABORDERIE gives the results of the treatment of zona by sodium salicylate, with marked and speedy relief to the neuralgia. A boy æt. 15, who had been treated for acute rheumatism two months before, was given 20 grs. sodium salicylate every 4 hours, and in 24 hours was free from pain, although the herpes continued. Two adults were treated same way, with prompt relief from neuralgia.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Exsection of the Distal Ends of Both Tibiæ and One Fibula for the Relief of Necrosis and Caries.

Dr. J. G. CARPENTER, *Louisville Med. Jour.*

W. B., aged twelve years, has a good family history on his mother's side, but some of his father's aunts and uncles have died of phthisis. W. B.'s health had always been good until March, 1884, when in company with some boys he went swimming in the creek, being exposed for several hours to the cold water and weather.

An attack of acute articular rheumatism followed this exposure. As this was subsiding, acute erysipelatous inflammation of the integuments over the tibial and fibular regions resulted, and a series of abscesses, situated over both tibiæ between the ankles and the spines, followed. These were evacuated by free incisions as they formed, which treatment was supplemented by hot fomentations or poultices, drainage and antiseptic dressings, alteratives, tonics, restructives, and nutritious food.

The posture of patient was semi-recumbent, with the feet flexed on the legs; the legs, thighs, and trunk being in a state of semi-flexion. The case was under the management of Dr. G. W. Bronough until the 30th of July, when the writer was called in consultation. Necrosis of the bones of the legs was previously the diagnosis of Dr. Bronough, and in consultation we agreed that caries of the lower articular ends of the bones of the legs existed, with necrosis of the shafts of the tibiæ, and that excision was the proper remedy in the case.

On August 1st, 1884, at 10 A.M., the patient was chloroformed, a one hun-

dred and fiftieth of a grain of atropia with one eighth of a grain of morphia sulphate being given hypodermically during the administration of the anesthetic; five grains of quinine were also given.

Anesthesia being complete, an exploratory incision was made over the lower third of the crest of the left tibia. The articular lower end was found to be carious, and the shaft to be necrosed. The periosteum was found separated from the bone by previous suppuration; in many places on the inner and posterior surfaces of the shaft burrows of pus existed, the shaft presenting a worm-eaten appearance. It was separated from its lower epiphysis. The exploratory incision was extended to the tubercle of the tibia, and the bone found to be diseased up to this point. Excision of the shaft below the tubercle was done by means of the chain-saw. The wound was thoroughly cleansed, drained with soft rubber drainage-tubes, disinfected with listerine, one to two, and dressed antiseptically. Coaptation of the lips of the wound was secured by means of silver sutures, placed one inch apart. Between these were put strips of rubber adhesive plaster half inch wide and long enough to encircle the leg one and one-third times. The limb was then wrapped in absorbent cotton soaked in listerine and water, one part to eight.

The operation having been completed on the left leg, an exploratory incision was made in the right leg over the crest of the tibia, from the ankle to the tubercle. Here the condition was similar to that presented by its companion bone, but in addition we found caries of the lower articular end of fibula. The integument over the bones was of a blue color, and much attenuated as in the left leg. There were also many pus

sinuses and fistulæ about the ends of the diseased bones, some of which involved the ankle-joint.

The right tibia, from the tubercle to the ankle-joint, was removed, and with it four inches of the lower end of the fibula. The wound was thoroughly cleansed, disinfected, drained, closed, and antiseptically dressed, as was done with the other limb.

The patient rallied well from the anesthesia and the by no means considerable shock following the operation of double exsection, though considerable nausea and vomiting followed the chloroform narcosis, and lasted for twenty-four hours.

August 3d, the surgical dressings being soiled were removed, and the wounds were washed and dressed antiseptically, listerine being used on the left, and bichloride of mercury on the right leg. The wounds were dressed every third day until the 12th, and every fourth day until September 3d, on every sixth day until October 4th, and then every eighth day until December 6th.

On October 23d the left leg was incased in a plaster-of-paris dressing, and on November 29th the right leg was treated after the same manner. The limbs were kept incased in plaster-of-paris till June 13, 1885, the knee and ankle-joints being thus made immovable. After the wounds had healed a little sinus formed on each leg near the tubercles of the tibiæ, and a small spiculum of bone was removed from each; under injections of balsam of Peru, the sinuses soon healed. Although there were bridges of union by first intention in both wounds, the greater part of each healed by granulation. Suppuration was slight, considering the size and length of the wounds and the amount of bone removed.

The silver sutures were removed at

periods ranging from the sixth to the fourteenth day. The drainage-tubes in the upper portion of the legs were removed about the twenty first day; those near the ankle in about six weeks.

The indications of the case seemed clearly to preponderate in favor of excision against amputation. By excision useful members will doubtless result, which for strength, solidity and length—the three great essentials to be realized after excision of long bones of lower extremities—excels any artificial limb that could have been applied had amputation been performed.

A question pertinent to the final convalescence of the case is, will reproduction of ossific matter take place in amount sufficient to make new bones, or will arrest of development of the bones and limbs result?

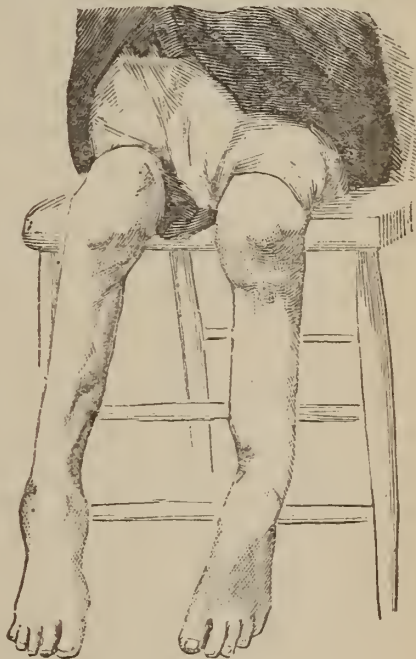
Regeneration of new bone is effected principally by the periosteum and the soft tissues and slightly by the endosteum. The case is all the more promising if the articular ends of the old bones be intact. All long bones have three centres of ossification, a nucleus for the shaft and one for each epiphysis. In the latter for the lower end of the tibia, ossification is perfect at twenty years; in that for the proximal end at twenty-five years. and in the lower epiphysis of the fibula at twenty years. In the ossific nucleus of the upper end of the tibia and interlamellar cartilage the growth or the reproduction of new bone is much more rapid from above downward than from below upward; and since the epiphysis of the tibia and interlamellar cartilage were destroyed by caries, and the lower end of tibia must depend principally, if not entirely, on the periosteum and soft tissues for the reproduction of bone, this must be slow. The epiphyses do not take an equal share in the development of the long

bone, but one is more active than the other. The upper epiphysis of the humerus and tibia, and the lower, in the radius and femur, contribute most to the development of the respective bones. It is well known to physiologists that the longitudinal growth of a bone is carried on mostly through the interlamellar cartilage between the epiphysis and shaft of the bone, while epiphyses are not joined to the shaft by osseous union until the bone has reached its full length. (Erichsen.)

"In excisions practiced on a growing child in whom the osseous development is not complete, if the whole of the epiphysis is removed the subsequent growth of the bone and the limb will be arrested in proportion to the extent of the influence of the removed epiphysis in the development of the bone." The proof is conclusive that reproduction of bone will take place, but that in the distal ends of the tibiæ it will be longer in doing so than in the shaft, and longer in the right leg than the left, since the lower fourth of the fibula was here also removed for caries and necrosis. The right leg will necessarily be shorter than the left, since three-fourths of the tibia and one-fourth of the fibula were removed.

In the upper extremities it is essential to get fibrous ankylosis of the joint, and semiflexion of the fore-arm upon the arm, even if great shortening results; in the lower extremities, osseous ankylosis, length, stability, and strength being the *desiderata*, after an excision or resection. When compact tissue is removed from the shaft of a bone for necrosis, callus is thrown out around the bone; if the cancellous tissue is involved the cavity left is filled with fibrous tissue, which finally ossifies. In speaking of caries and necrosis, Mr. Erichsen states that occasionally a very considerable extent

of the shaft, indeed, even of the whole of the tibia, may be removed as a loosened sequestrum from the interior of the periosteum, more or less consolidated and strengthened by the deposit of new bone. The result from excision is usually very satisfactory, the limb that is left being strong, useful, and sound.



At a clinic in Bellevue Hospital, in the fall of 1885, Prof. James R. Wood presented to the students a number of cases of excisions of the tibia and fibula in persons on whom he had operated successfully, removing one or both bones of the leg, and, with the exception of the cicatrix on the front surface of the leg for an index, it was difficult for the students to say which had been the disabled limb. Mr. Erichsen relates several cases (pages 253-4) in whom the knee-joint had been removed by excision. In one, that of a sailor, who was able seven years after the operation to perform all the duties of his calling;

another, that of a boy, who could run and walk rapidly, or hop two or three yards without putting the sound limb to the ground.

Listerine proved in this case to be as good an antiseptic in every respect as bichloride of mercury solution (strength 1-2000). Reproduction of bone has begun, and can be felt from the ankles to the tubercles of the tibiae. It is difficult to state how long it will be before the legs will be useful members. From present indications, however, it seems safe to say that in two or three years from the date of the operation reformation and consolidation of bone will be complete.

The figure here represented was made ten months after the operation.

A New Method of Reducing Dislocations of the Hip.

DR. S. J. ALLEN, M.D. An anæsthetic having been administered to the extent of producing complete muscular relaxation, the surgeon stands over the recumbent patient, whose leg he flexes upon the thigh, and the thigh raises to a right angle with the body, bringing the foot between the surgeon's legs, so that its dorsum rests against his nates. If then the surgeon, passing his right arm beneath the flexed knee, lifts the hips of the patient well from the bed or floor, and holds them thus suspended for a very short time, the head of the femur will quickly be drawn back into its socket. The weight of the hips and opposite leg rotates the body outwards, producing just sufficient abduction and extension to quietly draw the head of the femur through the slit in the capsular ligament, and direct it into the acetabulum.—

Annals of Surgery.

A Case of Membranous Occlusion of the Posterior Nares, with Operations by the Galvano-Cautery.

By W. E. CASSELBERRY, M.D.

Mr. E., aged about 40, native of Russian Poland, has suffered during the past thirteen years from an obstruction of the left nasal chamber. Thick, viscid, and foul muco-purulent crusts accumulated in the naris and naso-pharyngeal space, which he could neither expectorate nor evacuate by "blowing the nose," because of the impenetrability of the nostril to currents of air. Partial occlusion, also, of the right nasal chamber necessitated frequent and prolonged resource to mouth-breathing, and he has suffered in consequence from atrophic pharyngitis and laryngitis, with painful deglutition, cough, suffocative paroxysms, etc.

Deafness in the left ear and annoying tinnitus aurium have long been prominent symptoms. Most violent paroxysmal headaches, constant soreness upon the top of the head, vertigo, especially upon stooping, and various indescribable cephalic sensations of a most distressing character, have served to render life literally miserable.

Status Præsens.—Mr. E. is fairly well-proportioned. His face is not really emaciated, but it has a pinched expression indicative of constant suffering. His temperature and pulse are normal. By reflected light the pharynx was seen to be covered with a foul, viscid, muco-purulent substance, continuous in descent from the naso-pharyngeal space. The expired air had imparted to it a disgustingly fetid odor. On rhinoscopic examination the naso-pharynx was found to be filled with foul and rotten crusts, which necessitated thorough removal as a prerequisite to further inspection of the parts. While using the post-nasal syringe for this purpose, I noticed

that only a minute quantity of fluid passed through the left nostril, and none emerged unless the exit of the right side was held closed.

After syringing, an imperfect image only was obtainable—as the patient gagged upon the slightest provocation—sufficient, however to discern an almost total occlusion by *something* of the left choana. Efforts to pass a probe through from the anterior aperture failed; nor would Bellocq's canula or a Eustachian catheter penetrate; all striking an obstruction far back, described by the patient as a tender point. The finger introduced *per os* felt an impediment in the left posterior aperture.

On the following day I employed, successfully, Voltolini's uvula holder, to withdraw the soft palate from the pharyngeal wall, and obtained a much better view, and by the third day the patient had become so tolerant to instrumental manipulation that I could get a perfect rhinoscopic image. A tense membrane covered the left choana almost completely. Its free edge was thin and sharp, and approached so near to the septum that, as seen in the drawing, only a very small chink re-



Fig. 1.

mained between it and the septum narium. The left ostium tubæ could not be seen, the membrane evidently lying behind the Eustachian orifice, and so intercepting its image.

Guided by the rhinoscope, I passed a properly curved probe through the mouth, into the naso-pharynx, and through the chink between the membrane and septum. The edge of the

membrane could be pushed backward by the probe, and was then seen and felt to be tense and from one to two millimetres in thickness. Efforts were again made to pass several sizes of variously curved probes and bougies through the naris from the anterior aperture into the pharynx, and finally a small Mercier urethral catheter penetrated the chink and emerged into the mouth.

The choana upon the right was partially covered by a membrane which extended about half way across the aperture. As seen in the drawing, Fig. 1, it intercepted the view of the superior turbinated body, the outer half of the middle turbinated body, and the right ostium tubæ. This membrane was much thicker and less tense than that upon the left side.

Treatment.—Incision and consequent removal of these membranes was, evidently, the only effective remedy, and the galvano-cautery knife electrode suggested itself as the means best adapted to the end. The patient was practiced daily for one week in the use of the rhinoscope and introduction of instruments. A flexible silver probe with a handle attached, was bent by numerous trials to exactly the proper curve to pass readily, *via* the mouth and naso-pharynx, into the chink upon the left side and to pick up the edge of the membrane. A straight knife electrode was then made to conform to the same curve; and lastly, this instrument, with all attachments, handle, cord and battery, made several trial trips to the desired locality.

First Operation, Dec. 13th, 1884. All being in readiness, the patient held his own tongue by means of Turck's tongue-depressor. With the left hand I held a small rhinoscopic mirror in position, and, guided by the image, introduced the properly curved electrode, holding

the handle in the right hand, the cords coming over the right shoulder from Flemming's galvano-cautery battery. With this instrument one can make and break the current either by means of a treadle or by a button in the handle, but in order to avoid all unnecessary finger or pedal movements, as tending to unsteadiness, an assistant was in



Fig. 2.

readiness to turn on the current at the battery. I introduced the knife end of the electrode, one-half inch long, through the chink, and pressed its edge against the membrane backwards. The patient at this moment retracted the soft palate shutting off all vision for a moment, but, thanks to previous training, when told to relax all, he let the velum fall, again bringing everything into view. At a word the current was made at the battery, the knife end became in an instant red hot and the membrane was incised without bleeding and without sufficient pain to cause the patient to wince. In another instant the current was broken, and the electrode, cooling in a few seconds, was withdrawn.

On examination, I was myself somewhat astonished at the thoroughness of the work,—the size of the aperture produced. I had hardly expected to accomplish so much, but the matter is readily understood. The membrane being tense at its edge, upon incision it retracted from each side, leaving an opening, the size of which is represented in the accompanying drawing.

The delight of the patient when he discovered that he could again breathe

through that nostril was a pleasure to behold, and from that moment he has been completely relieved of all cephalic symptoms, including the left sided deafness.

I found the floor of the nose, the septum and the turbinated bodies, thickly incrustated with horribly fetid, cheesy masses, the accumulated, decomposed and desiccated secretions of years. These were so firmly adherent that they could be detached only by means of a probe during a period extending over several days. Their presence for so many years served to excite a bad nasopharyngeal catarrh, which, since the removal of the cause, has vastly improved under treatment; but as the disease in the pharynx, and elsewhere to a less extent, had progressed to the atrophic stage, complete alleviation of all catarrhal symptoms is scarcely to be hoped for.



Fig. 3.

On December 19th, I operated a second time, passing the electrode beneath the remaining edge of the membrane incising, and still further enlarging the aperture. After a third operation on December 29th, the left ostium tubæ became visible in the rhinoscopic mirror, the membrane having been so far removed as to cease to cover the Eustachian orifice, and two or three more slight touches served to completely obliterate the occlusion. Upon the right side four similar operations were performed with a like satisfactory result, so that now both posterior nares are widely patent and in an approximately natural condition.

It is probable that atresia of the posterior nares is by no means so rare as the few reported cases and the omission of all mention in many treatises might lead us to suppose. I have seen the reports of but two cases occurring in the adult; one by Voltolini, in which prolonged suffering had been occasioned by a total occlusion of the right choana, the condition being revealed finally upon rhinoscopic inspection, and its removal accomplished by the galvano-cautery; the other by Pomeroy, of complete osseous obstruction of the right nostril occasioned by a process of bone extending from the posterior extremity of the inferior turbinated body. The operation in this instance was by means of the burr-drill and surgical engine, the bony plate being thus perforated.

Records of cases occurring in infancy are more numerous, doubtless because the active interference with the nursing function necessitates one of two things, —either a correct diagnosis and an operation, or death and an opportunity for post-mortem examination. Ronaldson reports the case of a female child who died very soon after birth from inability to breathe through the nostrils. The posterior nares were found to be occluded by a thick membrane. Luschka's case occurred in a female child, and the openings were closed by bone. Opportunity for an autopsy offered also in this instance. The bony framework was formed on both sides from the horizontal plate of the palate bone, extended upwards to the inferior face of the sphenoid bone and to the median line joining its fellow of the opposite side. Betts reports a similar case in a fœtus of seven months.

Cohen recognized the lesion in a young infant troubled with difficulty in suckling, dyspnœa and frequent suffocative paroxysms. He operated and

saved the life of the child. Emmert operated successfully on a boy seven years old, who had bony occlusion of both choana. He had been nourished only with great difficulty when an infant, and he was subject to frequent suffocative attacks. Wilkinson, also, reports a similar case in a patient six years of age.

In all of these cases the malformation was congenital, and it is most likely that such is true in the case of Mr. E. He has never suffered from any violent acute or chronic inflammation or ulceration sufficient to develop adhesions, even if the lesion were of the nature of an adhesion, which it is not. Moreover, it is difficult to conceive of the complete development of such membranes *extra utero*.

But he experienced no inconvenience until thirteen years ago. Upon this point he has been carefully interrogated, and we must seek an explanation. It is not probable that in earlier years the membrane upon the left was relaxed and less complete, similar in condition to that which now existed upon the right, there remaining upon both sides apertures sufficiently large for all practical purposes? and that later it underwent contraction, became thinner, tense, and sufficiently extended to cover the choana? The left membranous fold was composed chiefly of a duplicature of mucous membrane, with possibly some connective tissue and muscular fibres interlying in the thicker portion towards the outer border. The right structure contained considerable muscular tissue. As no osseous malformation existed, it is probable that the membranes sprang simply from the soft parts. Upon the left the attachments were, apparently, to the mucous lining of the superior posterior edge of the vomer, the inferior surface of the body

of the sphenoid bone, the left pharyngeal wall behind the Eustachian orifice, and the superior posterior surface of the velum palati. Upon the right they included only the inferior surface of the body of the sphenoid and the right pharyngeal wall behind the Eustachian orifice.

The means employed to effect the removal of the membranes deserve some consideration. It is but one of many cases of nasal and pharyngeal surgery wherein I have found the galvano-cautery of the utmost utility. I do not say that it was impossible to have made the incision with a properly constructed bistoury, but to have done so from behind would have been a difficult if not dangerous procedure, and if attempted from in front one must have worked in the dark. The galvano-cautery electrode being a dull instrument, could be introduced, withdrawn and re-introduced without danger to the patient from gagging, until the point was brought into exactly the desired position, when in an instant it could be converted into a cutting instrument, and in another second reconverted into its harmless self, to be withdrawn. Little or no bleeding results, and the pain is infinitely less than would be supposed.

The battery which I employ is manufactured by Otto Flemming, of Philadelphia, from suggestions furnished by Carl Seiler. It has many advantages over any other that I have seen.

Cases Illustrating Diseases and Treatment of Cicatrices—Scar—Ulcer—Epithelioma. Fastening of Arm to Thorax after Burn. Operation—Recovery.

Dr. FRANK J. LUTZ, in *St. L. Cour. of Med.*, says:

Cicatricial tissue is of low vitality; its improvement and perfecting is but very slowly accomplished. Hence ulcerat-

ing cicatrices are not uncommon, nor is it of very rare occurrence to observe in persons of advanced age indolent ulcers upon the site of scars existing since infancy. Not infrequently we encounter well-marked papillary epithelial cancers which have taken the place of the original scar and subsequent ulcer. They are, according to Paget, most frequently seen on the lower extremities and connected with scars *repeatedly* injured. From the superficial tissues the neoplasm invades the deeper structures, the periosteum and the bones, and may endanger life by exhausting hemorrhages and by systemic infection.

CASE I.—The specimen which I have the pleasure of exhibiting to you was taken from a patient in whom there occurred a degeneration of a scar into an ulcer and finally into a well-marked epithelioma.

Anamnesis.—H. B., a farmer, from the northeastern part of the State, æt. 51, with no hereditary or acquired constitutional vice, sustained a compound, comminuted fracture of the left leg, thirty-three years ago, in the lower third, for which he was treated by the late Dr. Joseph McDowell. In the course of the reparative process, several necrotic pieces of bone were removed. The leg was somewhat deformed, but to all intents and purposes a useful one, and only occasionally gave him trouble, when, on account of some injury to the scar, which indicated the site of the original injury, an ulcer would form over it. Simple remedies and rest usually healed these ulcers. About two years ago he struck his leg, at the place where the scar and subsequent ulcers had been. There was free hemorrhage at the time and afterwards an ulcer formed which gradually grew larger and which bled quite freely.

Status Presens.—February 9, 1885

The patient is highly anemic from excessive hemorrhages. The neoplasm encircles the entire leg and extends upwardly to the middle of the leg and downwardly to the ankle-joint, and bleeds very freely on removing the dressings, or on touching it with a probe or the finger. Its surface exhibits shreds

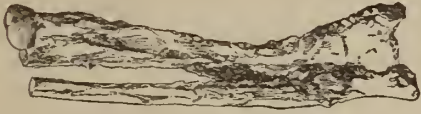


Fig. A.

of necrotic tissue and several openings through which the probe touches roughened bone. The ankle-joint is ankylosed. No enlarged glands. The diagnosis of epithelioma was subsequently confirmed by the microscope.

The leg was amputated February 17, at the junction of the upper and middle third; the wound healed partly by first intention and partly by granulation. His general condition began to improve at once, and he was allowed to return to his home, March 29, 1885.

The site of fracture is easily discerned; there is angling and lateral union of the tibia and fibula; part of the anterior surface of the tibia is destroyed and both bones are covered with osteophytes.

The frightful deformities which are sometimes produced by the contraction of extensive cicatrices after burns, come under our notice both for cosmetic purposes and also for the restoration to usefulness of the part involved in the cicatrix.

CASE II.—The photographs to which I desire to direct your attention are those of C. L., æt. 43, who, according to the history kindly furnished me by my friend, Dr. Dean, was admitted into the City Hospital about nineteen months prior to his coming under my observa-

tion, August 19, 1884. More than one-third of the surface of the trunk and the lateral aspect of the thigh were involved in the burn. Cicatrization aided by skin grafting took place slowly but surely, and when the patient left the City Hospital, nineteen months after admission, the entire burnt surface, except a few ulcerating patches, was covered by a very pliable cicatrix. Unfortunately the arm was fastened to the side for two-thirds of its length, as shown in the picture marked B, and was therefore useless to him. He sought relief for this condition.

Owing to a very exhausting diarrhœa from which he had suffered during his



FIG. B.

illness, his general condition required attention, before the arm was freed from its attachment to the trunk by a free division of the cicatrix and the subjacent tissues. Extension was employed from the very beginning, and so soon as the large wound surfaces began to granulate they were freely covered with grafts to facilitate and accelerate their cicatrization and also to prevent as much as possible the contraction of the new cicatrix, for it is a well-known fact that cicatrices formed from grafts have little tendency to contract and do contract less than the ordinary cicatrix.

March 31, 1885, the patient was dismissed presenting the appearance shown



FIG. C.

in the photograph marked C, and having very good use of his arm.

Sponge-Grafts and Martin's Bandage in Varicose Ulcers.

A correspondent of the *British Medical Journal* reports :

The most common cause of ulcers of the leg is undoubtedly the presence of one or more varicose veins. Very often the affected leg or legs may appear at first sight entirely free from them, but a minute inspection will generally reveal a small varicose vein, leaving the ulcer at its upper edge. The scars left by varicose ulcers are generally pigmented, and might be called copper colored.

With regard to the treatment of these ulcers ; the system is nearly always low, tonics are, therefore, indicated.

The local treatment with Martin's bandage and sponge grafts, which I shall describe presently, I have found very successful. Several of my patients had already tried rubber bandages and given them up, but all of these are now wearing them, although their ulcers are cured. The medical man ought himself

to bandage the leg evenly and not too tightly from the root of the toes upwards, nearly covering the heel, to just below the knee, several times, so as to thoroughly instruct the patient how to do it. When the patient can do this properly, the bandage should be applied before getting off the bed in the morning, and should not be taken off until after going to bed at night. The bandage ought to be washed with cold water every two or three days. With respect to sponge grafts, I prepare mine in the following manner. Using a fine piece of new sponge, which I always keep in a bottle of weak solution of carbolic acid, I cut off a piece from the outside with a pair of sharp scissors, so as to make a smooth surface. I then pinch up the sponge in a pair of dressing-forceps, so as to leave the pinched-up smooth surface a little above the edge of the forceps ; this I cut off with a sharp razor, and so get a very thin section of the sponge. When dry, a number of these sections may be conveniently carried in an envelope in a pocket-book. The way to apply one is to damp it first, and then to cut it to the shape of the ulcer, but a little smaller. It should be laid smoothly on the ulcer, a piece of soft rag placed over it, and the bandage evenly put on over all. The sponge will adhere in a very short time by the growth of granulations between its interstices. Should it not be painful or offensive, it may be left on until it falls off with the scab, or is absorbed. Sometimes, however, in a few days it is painful from the confinement of discharge. It should be taken off, a warm linseed poultice applied to clean the wound, and a fresh piece of sponge applied as before. The wound will, however, be found to be smaller after each application until it is healed. I was at first afraid to apply the sponge to

ulcers which appeared irritable. I found, however, that the sponge suited them equally well; and I should not hesitate to apply the sections to any ulcer.

In the treatment of these varicose ulcers, and indeed of varicose veins in general, experience has taught me that the patient should always sleep with his heels higher than his head. This may be effected by putting blocks of wood under the legs of the bedstead at the foot. It is of no use whatever to put pillows, etc., under the foot of the mattress.

VENEREAL DISEASES.

On the eradication of Syphilis During the First Stage by Surgical Means.

We make a few extracts from an article by Dr. LEUF, of Brooklyn, published in *N. Y. Med. Jour.*

Syphilis is a constitutional disease and contagious in the true sense of the word; that is, communicable only by contact, and therefore produced invariably by inoculation—except it occasionally be autogenetic. It is preceded by a period of incubation, and manifests itself in three periods—primary, secondary, tertiary.

To adopt a rational plan for the interception of this poison previous to its general invasion of the body, the following questions must be answered:

1. *Does the disease arise de novo—is it autogenetic?*

I cannot deny the possibility of its occasional spontaneous origin, although compelled to admit that it must be a comparatively rare occurrence.

2. *What are the necessary conditions for inoculation?*

These consist in the presence of the virus and stable living cells in direct contact. The cutis being composed of

dead, and to some extent desiccated, cells, it is evident that inoculation cannot take place through it.

3. *What is the effect of the virus at the seat of inoculation?*

It gradually, but inevitably, induces circumscribed tissue changes of a special character, which become evident only after a lapse of time varying from a little more than a week to more than two months. The tissue changes consist mainly of a proliferation of the vessel-walls and immediate fixed cells, without the usual amount of serous effusion and hyperæmia. They manifest themselves in the form of an elevated ulceroid, with a hard base, and having a serous rather than a purulent discharge. The variation in the time at which the initial lesion appears after inoculation is due more, if not entirely, to its location with reference to the lymphatic vessels, than to various grades of susceptibility by some supposed to exist in the individual. This is also especially true as regards the length of the interval between the appearance of the chancre and the onset of secondary symptoms.

4. *Is there a decided interval between local and systemic infections?*

An affirmative answer to this question will be gainsaid by no one. An intermediate manifestation, however, is apparent between these local and general disturbances, and it shows itself in the first set of lymphatic glands reached by the lymphatic vessels beginning at the seat of inoculation. The time at which these glands show evidence of participation in the syphilitic process varies. Enlargement may commence shortly after the formation of the primary lesion or within a brief period before the onset of general secondary symptoms. There can be no doubt, though, about there being a distinct interval between local and general infection. The

action of the lymphatic glands leads to the next question.

5. *By what channels does the disease enter the system—by the blood or by the lymphatics?*

By the blood?—When we consider the rapidity with which the blood flows through our bodies, and the uniform results obtained in producing rapid effects by intra-sanguineous injections, it is impossible to reconcile these well-established facts with the comparative exceeding slowness of general syphilitic infection, unless it be on one ground. This would be that a second incubation takes place in the blood analogous to that at the point of inoculation, or that the period of incubation of the virus in the blood is longer than that among the stable cells; but this would be contrary to all known physiologic laws and processes. Were the blood-vessels and their contents the distributing channels of this poison, the general infection of the patient would not be so long in taking effect, nor would it be interrupted. The blood is not the channel by which the virus enters the system.

By the lymphatics?—We all know, from the results of investigation in the physiological and pathological laboratories, as well as clinical experience, that the blood is the body's distributor of food and air in its passage from the heart, while on its return it renovates the tissues by the abstraction of those impurities that are the natural result of physiological metamorphosis. The lymphatics, on the contrary, among other things, perform an interceptive function in preventing or retarding the entrance into the circulating blood of those deleterious substances from the elimination of which there appears to be no special provision. Thus, although carbonic oxide and urea are very poisonous, they enter the blood to be prompt-

ly excreted, the one by the lungs and the other by the kidneys; there is a special provision for their elimination, as they are a normal, constant and necessary product. Contrariwise, the virus of carcinoma is not the outcome of normal, constant and necessary physiological activity, but the result of changes that are abnormal, inconstant, and decidedly unnecessary, and hence has not provided for it a special and normal eliminative organ. If it once enters the blood, it will remain and spread disaster. It only gets there insidiously. The blood does not take it up. Lymphatic vessels which ramify throughout the body and lymph-spaces existing in nearly all the tissues absorb this product of unusual and abnormal metamorphosis and conduct it to the first set of lymphatic glands. Here it is retained as long as the gland is capable of holding it, and, when this retentive function becomes inefficient, the poison passes into the blood, and the general infection of the individual is the immediate and inevitable result.

It is through the lymphatics, then, that syphilis enters the system, although retarded in its progress through the glands.

6. *Can the progress of the virus be traced from the time and place of entrance into the tissues until general infection has occurred?*

This is possible, and it occurs in the following way:

As soon as the poison comes in contact with the living cells it sets up an irritative process, which, in consequence of its persistence and special qualities, eventuates in the peculiar cell proliferation that gives rise to the initial lesion of syphilis. This cell formation is peculiar in that it involves the vessel-walls, causing them to grow eccentrically as well as concentrically, thus giving rise

to an increase in their external diameter coincident with a diminution of calibre. Many detached cells and nuclei are to be found within the lumen of the capillaries obstructing the flow of blood. The immediate fixed connective-tissue cells also participate in the proliferating process, and to such an extent that the intercapillary spaces become packed with these new formations. In consequence of the diminished calibre of the vessels, there is an absence of the degree of hyperæmia so common in pathological cell formations. Serous effusion is also lacking on account of the scanty blood-supply and the thickening of the vascular walls. Those compacted cells which are on and nearest the surface, being enabled to imbibe their nourishment from all directions except one, die and fall off from this side—that is, die at the surface. Considerable pressure is exerted within this cell accumulation and causes the contained serum to find its way out through the surface breach, in which direction evidently is the least resistance. The induration of this, the chancre, is due to the close packing of the cells, the lessened blood-supply, and the spare amount of serous effusion, the long continuance of the induration after it has healed over is also accounted for by the diminished local circulation and abnormal condition of the vascular walls as being a decided interference in carrying on any absorptive process.

The lymph-spaces and vessels in contact with these new products absorb the virus and convey it to the nearest lymph-glands. Here the virus is arrested and tends to set up a process identical with that existing at the place whence it just arrived. Eventually this is accomplished as well as it is possible in a different tissue. The result is an enlarged and indurated gland. We all know, too, how hard are these glands

and how hard is the chancre. The typical primary sore does not really suppurate, for it simply throws off superficial layers of cells and *débris* with a limited amount of modified serum. A fact that is interesting to note now is that the glands involved, although enlarged and indurated, rarely suppurate.

The production of leucocytes constitutes one of the functions of lymphatic glands, and from them the white corpuscles are at once admitted to the circulating blood. It is evident from this that, after a brief residence in these glands, the poison will be admitted to the blood and pervade the whole body. The glands, however, as a rule, either destroy the virus they have brought to them, or render it innocuous, but not in all instances. It is hardly necessary to remark that in the case of syphilis we have a notable exception to this rule, but not without compensatory action of the gland—to wit, the retention of the virus for a sufficient length of time to admit of its mechanical removal. When the virus has penetrated those parts of the glands which are about to be launched into the circulating blood, the first step toward general infection has been taken. Additional loads of virus are thereafter constantly being thrust into the circulation and carried by it to all parts of the body. The other lymphatic glands being more susceptible to the influence of this and similar poisons than any of the other tissues, it is but natural that a general glandular disturbance should note the beginning of secondary symptoms, and that is actually what occurs in most instances. That the more superficial glands should be the ones mentioned as being enlarged at this time is only natural, for the deeper ones are not felt by the physician. Therefore does it happen that

we are usually told that the cervical and supra-trochlear glands are the ones most commonly found enlarged at, or just preceding, the onset of secondary symptoms.

It is a widely known fact that a person having syphilis is unable to develop a second primary lesion so long as he gives evidence of existing constitutional infection. Less widely known is the equally well-established fact that additional chancres may be developed *ad libitum* up to a short time before the outbreak of symptoms denoting constitutional infection.

In fact, the strongest claim for the curability of syphilis is based upon this very fact of a person with general symptoms being uninoculable with the same disease.

If this is the correct view, and surely it is the most reasonable one, it is equally as certain that constitutional syphilis does not exist up to a short time before the secondary eruptions, because a second chancre or series of chancres may be developed either by auto-inoculation or hetero-inoculation during this particular period.

Complete excision of all the structure harboring the virus while it is still local will positively abort the disease. At present it appears that the chancre and nearest set of lymphatic glands are the only structures affected during this primary period. Their thorough excision promises to effect the immediate termination of the disease, if accomplished sufficiently early. I should call sufficiently early any time previous to the appearance of secondary symptoms, and while the glands were still not much enlarged. All measures of this kind would be, however, absolutely contraindicated after the outbreak of the secondary stage.

I think one thing very important and

essential to success. It is that, inasmuch as glandular infection is due to material coming from the chancre, the safest way would be to remove the primary sore first and the glands afterward. Then, again, as the virus traverses gland after gland in regular order, reaching the one farthest removed after it has affected the nearer ones, it would be most safe to begin the glandular excision with the removal of the most distant one first and ending with the nearest and first affected.

I recognize at once one possible source of failure in this treatment, and that is that some of the virus may be retained in the lymphatic vessels between the excised sore and glands and permit of its absorption through collateral channels. This is guarded against, as far as possible, by the elimination of the active source of infection, the chancre, before the absorbents are cut off from their receiving glands. Perhaps it would be well to allow several hours to elapse between the excision of the sore and of the glands, so as to admit of the convergence of all the virus in the lymphatics to the glands about to be extirpated. Or, best of all, it would be most advisable to excise all the lymphatics between the chancre and glands if at all affected, and possibly it would be still better to always excise these vessels, whether they appear to be affected or not.

Perforation of the Septum Nasi.

Mr. JONATHAN HUTCHINSON (*Medical Times and Gazette*). The author states that there exists a general belief that perforating ulcers of the septum of the nose (the cartilage) imply syphilis, whereas he feels sure such inference is often incorrect. In my experience syphilis prefers the bony septum, and very rarely attacks the cartilaginous portion. I believe that constant

irritation by the finger nail induces death of the perichondrium at a small point on the septum. This slowly extends—the cartilage atrophies—a small perforation occurs, which may occupy many years in reaching $\frac{1}{4}$ inch in diameter. The only annoyance is the presence of small scabs on the unhealed edges, which irritate and cause a desire to blow the nose. A physician who consulted me had, during fifteen years' experience of such a perforation in his own case, tried every possible method of treatment to heal the edges without avail.—*St. Louis Med. and Surg. Journal.*

DISEASES OF THE EYE AND EAR.

Glycerinum Acidi Carbolici in Acute Earache.

Dr. H. BENDELACK HEWETSON thus writes in the *Lancet*:

It is now about seven years since a patient came to me saying that his little boy of five years of age had, within the previous three hours, developed acute earache, and that his temperature was about 100° F. The temperature had been taken by his mother, and was rising. The thought occurred to me, why not inject glycerine and carbolic acid into the ears, as it was evidently a case of inflammation of the middle ear, which would eventually end in perforation and relief, as it had in this child done several times before. I injected this solution of carbolic acid and glycerine, and, to my great delight, it acted as in toothache, almost instantly relieving the acute pain. This was done at three in the afternoon, and the next morning the boy was perfectly well, and heard nearly naturally, though not quite, as he still had a cold. The tympanum never

became perforated, as it had done on previous occasions, and the temperature rapidly fell to normal. This is a typical case, and I may say that I have repeated it times without number in the same way, both in children and adults—that is, in earache and in catarrhal otitis. In all cases of this kind, at whatever stage it is applied for earache, it invariably stops the pain: and I feel sure that in many cases, even when perforation seemed imminent, the relief from the pain diminished the tension, and by its strong antiphlogistic as well as anæsthetic power perforation has been avoided. If an earache returns, as it does sometimes, where a perforation has taken place and has again closed, the application of the glycerine and carbolic acid gives great relief, and stops the tendency to recurrence to the same thing in some cases, but not in all, although it always relieves pain, and thus constitutional disturbance. In cases of earache from periostitis, either in cases of chronic otorrhœa or in uncomplicated cases of inflammation of the external auditory meatus, the relief to the pain is not so rapid; but if the carbolic acid and glycerine be allowed to remain in the meatus, then relief from pain is obtained in from ten to thirty minutes. It occasionally returns in these cases, when the solution can be reapplied with renewed benefit. By this means I am convinced, by a large experience extending over some years, that if the treatment is used early, perforation of the tympanum can be stayed in many cases. Of course, the tendency to catarrh, or other causes which make a patient prone to otitis, is not the object of this paper, nor also is the after-treatment of such cases where the otitis is got rid of. I am dealing only and solely with earache, and the circumstances immediately surrounding it. I may say that I am not

only relating my own experience of the treatment ; but, in consequence of a paper which I read before the Yorkshire Medical Society, it has been quite generally used by medical men in the north of England who have reported their experience to me. There is one way in which it may fail to relieve pain at once, and that is in case it is poured too quickly into the external auditory meatus, when the patient has his head aside, with lobe of the ear in its natural position. In this way the air cannot escape sufficiently freely, and a bubble of air prevents the fluid from reaching the bottom of the meatus. The proper way is to draw the lobe of the ear forcibly upwards and backwards, as in syringing the ear to straighten the entrance to the meatus, and then allow the fluid to trickle gently down one side, whilst the air escapes up the opposite side. In cases where the meatus is very swollen at its orifice, I have injected the solution up a fine elastic catheter well covered with vaseline to promote its easy passage, and in this way I have relieved earache when it could not have been alleviated except by a hypodermic injection of morphia or such means.—*Med. and Surg. Reporter.*

DISEASES OF THE SKIN.

On the Conditions which Precede Keloid and on Some Rare Forms of that Disease.

MR. JONATHAN HUTCHINSON contributes an able paper on this subject to the *London Med. Times*, which concludes with the following propositions :

1. That with keloid, as with other skin diseases, we must not expect too close a conformity to the type form.

2. That for clinical convenience we may recognize several varieties of keloid, the prognosis as to spontaneous dis-

appearance and proneness to return after excision differing much in each.

3. That the first and most typical form is that in which keloid begins in very small, perhaps forgotten scars, and slowly spreads far beyond their limits into sound skin. In most cases the extension and duration are indefinite ; and the hardness, glossiness, abruptness of outline, etc., are always well marked. The proneness to recur very quickly after excision is very great in these.

4. That in the second group, in which keloid growth begins in the middle of large scars, such as those of burns, it is seldom so well characterised. It often does not extend beyond the scar, and often, especially in young persons, soon begins to soften again and to gradually disappear.

5. That in the third form the keloid growth is deeper, and never produces the glossy, superficial, elevated, and spurred patches which occur in the others. These cases are very slow, and show but little tendency to spontaneous disappearance. They do not develop in connection with large scars, but rather with inflammatory damage to the skin. They are less prone than the others to recur after excision.

6. That although definite scars almost invariably precede the formation of keloid, yet that there are allied conditions which result rather from inflammation after injury than from anything which is demonstrable as cicatrix.

7. That the cases of multiple keloid prove either that there is in some persons a remarkable tendency to the disease, or that primary patches have the power of infecting the blood and producing others.

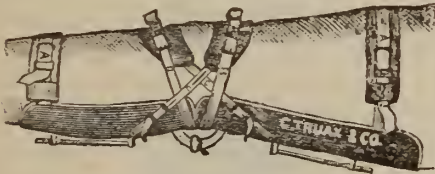
8. That there is little or no clinical proof of tendency on the part of keloid to pass into cancer.—*Med. and Surg. Reporter.*

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

A New Patella Splint.

DR. L. R. MARKLEY, of Juniata, Neb., sends us the following description and cut of an apparatus designed by him :

I desire to call the attention of the profession to a splint, designed principally for the treatment of transverse fracture of the patella, but which I believe will also be found useful in cases of fracture of the limb, at or near the knee joint, and in many cases of dislocation. A few years ago, while yet a student, I conceived the idea of making a splint as here illustrated, and as I have had made for me by Messrs. Chas. Truax & Co., Chicago.



This splint consists of two well padded iron troughs, shaped to fit the limb above and below the knee. These troughs are connected with an adjustable hinge having a circle stop which will permit the splint being applied and firmly held, either straight or flexed at any desirable angle. It can thus be used straight in treating fractures of the patella, or bent to meet the requirements when used in other cases. The two screws shown underneath the brace can be turned by a removable thumb key, and are attached to sliding heads running in slots cut in the troughs. To these heads are attached the straps C C, which places the amount of traction on the patella completely under the control of the operator. Underneath these straps are placed two well fitting pads, which hold the patella in its proper position. The bands B B are made use

of to prevent the pads from slipping too far over the patella. The bands A A hold the extremities of the splint firmly to the limb.

In applying the splint, the bands A A and B B should be first adjusted ; then after tightening the straps C C (using the buckles), traction can be made with the thumb screws until the edges of the fractured bone are brought together. If, however, the ligamentum patellæ is too strong to be overcome by this measure and thus prevents a complete reduction of the fracture, I believe it would be safe to perform at least partial tenotomy of the ligament and thus render its reduction by this method possible. Whether or not the pressure of the pads will cause sloughing in some cases I have not been able to determine, for in country practice, cases of this kind are seldom met with.

I have had several surgeons examine the splint, and they all believe the principle to be a good one.

I have not had the opportunity to make a practical test of the splint since I had it made, and in presenting it to the profession, I hope that some one who may deem it worthy of a trial, and having an opportunity of trying it, if not for a fracture of the patella, some other accident at or in close proximity to the knee, will report the result.

Treatment of Compound Fractures by Wiring and Drainage.

Dr. W. P. VERITY, in a paper read before the Am. Med. Ass. and published in *Med. Rec.*, said in conclusion :

When a case of compound comminuted fracture came under his care, he said, the first thing he did after the surrounding parts were shaved and cleaned, was to remove all loose fragments which were liable to act as irritants, then trimming off the sharp edges, if neces-

sary, the ends of the bone were wired together. Free drainage was provided for by large tubes from the most dependent portion, and the whole extremity was then covered with a thick antiseptic dressing and encased in a plaster cast, which is to be removed at each dressing. He claims the following advantages for this method of treatment :

1. All points of bone and injured tissue-fragments likely to act as irritants are removed.

2. It is obvious that, as a rule, there can be no shortening.

3. No extension is needed, and thus the necessity of complicated apparatus, which too often interferes with proper antiseptic dressings, is done away with.

4. Proper retention of the fragments in place is presumably secured, thus avoiding any possible danger of the fragments overriding and irritating the soft tissues.

5. The bones unite more quickly for reasons which will be obvious when the principles which underlie all procedures to secure union of ununited fractures are recollected.

6. Drainage, besides its other advantages, prevents extension of the inflammation.

These points were well illustrated with a report of eight cases, accompanied by drawings, representing the pathological and fever condition of each case.

Surgery for Piano-Forte Players.

The delicate manipulations of the chemist and physicist or the effective touch of the artist are by no means natural; they result only from the most careful training. In music, whether in using the keys of an instrument, or in working the strings directly, as in zither or harp, every student remembers the weary practice which has gained him his present proficiency. No amount of de-

votion, however, seems to have succeeded in overcoming the obstinate weakness of the third or ring finger. Innumerable



No. 1.—Natural condition.



No. 2.—After operation.

The illustrations show respectively the muscular system of the right hand in its natural condition, and after the operation has been performed.

exercises and daily fingering of the keyboard have left that member but slightly stronger at the end than in the begin-

ning. When for instance, the middle and little fingers are pressed upon the keys to produce a continuous sound, it is almost impossible to bring the ring finger into intermittent use with a strength sufficient to produce any equality in the tones. The reason is very simple, but rather curious. The extensor communis digitorum muscle, which moves the ring finger, is connected by lateral or accessory tendons with the muscles of the neighboring digits, and when these are held down, the accessory tendons prevent the free action of the muscular fibres of the third finger, and hence the clumsy result. These accessory tendons are sometimes found in both hands, often only in one, which in this case is usually the right hand. Occasionally, the extensor muscle of the ring finger splits at the point of departure of the accessory tendons, and when reunited leaves a button hole appearance, and now and then these tendons are entirely absent. The possibility of removing this restriction in the use of the ring finger by dividing the accessory tendons suggested itself many years ago, but it is only of late years that the operation has become at all common. Dr. Forbes, the Demonstrator of Anatomy at Jefferson College, and Mr. Zeckwer, the Director of the Philadelphia Musical Academy, have both been much interested in the subject, and have done much to make the operation popular. By this division of the accessory tendons, the liberation of the ring finger was complete. After such an operation, which is often performed on both hands at one sitting, and without the loss of perhaps more than half a drachm of blood, the finger could be elevated an inch higher above the plane of the hand, and could be used with delightful freedom. There was an entire absence of the sense of exertion which

was formerly so painful. Out of fourteen operations which have been performed by Dr. Forbes, all were entirely successful, and in none did any unpleasant results follow. Nor is this resulting liberty at the expense of power in any other direction. The operation does not decrease in the least the ordinary functions of the extensor muscle. Since it can be performed by a surgeon of any competence, it promises in time to become a part of every conservatory course.—*Scientific American*.

Creasote Water as a Local Anæsthetic.

Dr. E. R. SQUIBB (*Ephemeris*): "The officinal aqua creasoti, or creasote water, is so important as a preparation for one special use that it is well to notice it in order to emphasize that special use. It is a simple one per cent. solution of wood creasote in water, and, like similar solutions of carbolic acid and of cresol, it is a most effective local anæsthetic and topical dressing to burns and scalds. It is no better than the solutions of carbolic acid, or of coal-tar creasote, for this purpose, but it is quite as good, so that whichever is most accessible or most convenient may be used. This creasote water, as made by the above formula, or diluted with an equal volume of water, or with more water for delicate surfaces in women and children, and applied by means of a single thickness of thin muslin, or worn-out cotton or linen, such as handkerchief stuff, and the application renewed from time to time, as the return of pain requires it, will relieve the pain of burns and scalds in five to ten minutes, and will maintain the relief as long as the applications are properly renewed, or until the painful stage is over. It is also very effective as a local anæsthetic for general use in all painful

conditions which affect the surface only, such as the pain of erysipelas. The benumbing effect of these phenols upon the skin is promptly reached, and can be carried to almost every degree that is desirable, by simple management of the strength of the solutions and the mode of application. They are true anæsthetics to the skin, which the much-lauded cocaine is not. This statement has been published so often during the past twenty years, and the treatment has been so effective in so many hands, that it is wonderful to notice how the common practice is still to use the old and comparatively useless hot dressings, such as carron oil, white lead ground in oil, flour, liniments, etc., or the newer application of solution of bicarbonate of sodium."

The Treatment of Gangrenous Intestine in Strangulated Hernia.

In a paper having the above title, W. MITCHELL BANKS, F. R. C. S., (*Lond. Med. Times*), sums up with the following conclusions :

(1) That when gangrenous gut is discovered in a hernial sac, no attempt whatever should be made to divide the stricture.

(2) That practical experience is required to determine the expediency of drawing down into the hernial opening a fresh piece of bowel.

(3) That the cases appropriate for resection of the gut must be very few, requiring, as it does, that the patient should be young and vigorous, with abundant reparative power; that the hernial sac should not be full of putrid pus or evacuations from a perforated bowel; and that the operation should be done in daylight, and with competent assistance and antiseptic precautions. So far the statistics of resection of gangrenous bowel show a majority of 52

per cent., whereas by making an artificial anus all the patient's immediately dangerous symptoms are relieved, while he has a chance of subsequent cure (a) by spontaneous closure of the aperture; (b) by the use of the enterotome or the rubber tube; and (c) by the employment of resection at a later stage, the statistics of which show a mortality of only 38 per cent.

(4) That in resecting a bowel it is not necessary to have any apparatus to distend it, and that while the fingers of an able assistant will generally serve to control the divided ends, it may be necessary to use some simple clamping instrument having parallel blades and covered with rubber.—*Med. Med. Jour.*

Combination of Chloroform and Cocaine.

Dr. FERRIER lately read a report before the Surgical Society of Paris, on a work by Dr. DRANSART, who proposed the adjunction of *chloroform* to *cocaine* for operations on the eye. The chloroform is administered in the usual way after an instillation of cocaine, and the time taken up to administer the former is thus reduced to one or two minutes. The advantages claimed for this method are that the deeper tissues of the eye, such as the iris, muscles, optic nerve, etc., may be cut into without causing pain, which would not be the case with the instillation of cocaine alone. The duration of chloroformisation being considerably reduced, the dangers attending the administration of chloroform are *pro tanto* diminished.—*Lancet*.

Foreign Bodies in a Hernia.

A sixty-year-old man came to Dr. S. STORKER (*Corresp. f. Sch. Aertzl*), with all the symptoms of strangulated hernia. Palpation alone revealed the fact that substances of an unusual kind were embedded in the inguinal hernia, which

was of the size of a peach. The hernia was opened, and found to be completely filled with frogs' thighs, the patient having eaten the day before a whole plateful of this uncommon dish. The suture applied did not endure, although disinfected carbolyzed silk had been employed, and an intestinal fistula resulted, which healed after an existence of three months. In the report quoted, S. cites a number of similar instances. In nearly all cases mentioned in medical literature of impacted foreign bodies of bony and irregular structure, where an opening of the intestines had become necessary, an intestinal fistula of some months' duration, though final cure, seems to have been the invariable result. —*Med. & Surg. Reporter.*

How to Deodorize and Prescribe Iodoform.

DR. CHARLES PETIT STOUT, closes an interesting article in *Ther. Gazette*, as follows :

1. To make a deodorized powder the iodoform must be in a very fine powder, likewise the chemical used to deodorize, and very thoroughly incorporated and let stand for one or two months in a glass stoppered bottle.

2. To make ointments, take the deodorized iodoform and mix with vaseline or cosmoline, as the best base for the ointments.

3. In making into a pill mass add glycerin, which will keep the pill moist for a long time, owing to the hygroscopic properties of the glycerin.

4. To make suppositories, melt the ol. theobromæ at a gentle heat and stir in the deodorized powder, and pour into moulds of usual size.

5. To make the ethereal solution, add deodorized powder to the ether : can use one drachm to ounce of ether, or more if desired.

6 To make nasal bougies, cut a

slender piece of fine strong sponge, about one inch and a half long, roll between two boards with pressure in shape of a thin cylinder, place a piece of strong silk through one end, and melt by gentle heat the vaseline or cosmoline with the white wax, and stir in the deodorized iodoform ; keep stirring, and immerse the sponge and withdraw and cool and immerse again, and repeating until large enough (but stirring constantly), or about the size of a goose-quill ; then hang up by silk until cool ; then coat with a solution of gelatine containing about ten per cent. of glycerin, which will easily melt at the temperature of the body. The bougie should be introduced into the nasal cavity at night and withdrawn the next morning. One will do for several applications.

7. Can also use the deodorized iodoform by mixing with solution of collodion or solution of gutta-percha, by mixing the powder with either solution and painting the parts and let dry, then paint over the first with the pure solution. By this means we prevent the iodoform from volatilizing by this impenetrable coating and secure the action of the deodorized iodoform.

The following formulæ I have satisfactorily used, and recommend them after making many experimental combinations :

Pulv., No. 1. R Iodoform, parts 9 ; coumarin, part 1. M.

Pulv., No. 2. R Iodoform, parts 9 ; vanillin, part 1. M.

Pulv., No. 3. R Iodoform, parts 9 ; acid. cinnamic, parts 2. M.

For Ointments.—No. 1. R pulv., Nos. 1, 2, or 3, parts 60 ; ung. petroli, part 420. M.

For Pills. R Iodoform, 3 i ; vanillin, coumarin, āā gr. v ; glycerin, gtt, v ; bals. Peru, q. s. M. et fiat mas et div. in pil. No. xxx, silver-coated.

For Ethereal Solutions. No. 1. R
pulv. Nos. 1, 2, or 3, 3 i; ether, f $\frac{3}{4}$ i. M.

Cupping in Hernia.

Dr. MIDDLETON sends us the following interesting bit of experience: "A few years ago, while practising in the country, I was called in haste to a case of strangulated hernia. Patient had been ruptured on both sides for several years, and had worn no truss, though his bowels had given him trouble, sometimes on one side, sometimes on the other. I found an oblique inguinal hernia, about the size of a hen's egg, upon the right side. Gave an opiate and tried to reduce, but failed; then sent for chloroform. In the meantime the patient suffered such intense pain in the region of the umbilicus that I tried to mitigate his sufferings by placing two large dry cups in that locality. The cups used were common glass tumblers. After allowing them to remain for a few moments, I found, to my surprise, that the hernia was gone.—*Weekly Med. Review.*

The Treatment of Hæmorrhoids by Injection.

Under the above title is an article by Dr. CHARLES B. KELSEY, of New York, in *The American Journal of Medical Science* for July. Dr. Kelsey is a strong advocate of the essentially modern method of the treatment of piles by injections of carbolic acid. The acid is of varying strength. He has three solutions constantly ready, one of fifteen, one of thirty-three, and one of fifty per cent. He sometimes uses the strong acid. In a severe case, he would begin with the strongest solution; in a mild case with one of the weaker solutions. He finds this method to be comparatively painless and uniformly successful.

The famous Western "pile cure" is

composed of equal parts of strong carbolic acid and sweet oil, of which half a dozen drops are injected into each pile.

Dr. J. M. Matthews, of Louisville, gives the following rules: (1) Use the acid only in the smallest tumors. (2) Should it be used in a large tumor, inject once only in one portion, and wait several days, and then inject another portion. (3) Use the smallest amount possible in injecting, say one to three drops of the mixture of sweet oil and carbolic acid.

The injection turns the pile white, coagulates the blood in its vessels, and results in its shrinking away without the inflammation being severe enough at any one time to prevent the patient from attending to his business.—*Boston Medical and Surgical Journal.*

On Nutritive Dressing of Large Granulating Surfaces.

In those extreme cases in which the life of the patient is being sapped by the constant drain of a large suppurating surface, we may be, by this means, enabled to furnish to the weakened system, through the absorbent powers of the thin-walled capillaries of the granulations of the wound, the nourishment which will enable it to withstand the large demands being made upon it, and to finally overthrow its burden by bringing about a complete cicatrization of the surface. Our attention has been called to this subject by a paper in the *Therapeutic Gazette*, by Dr. Wm. Barton Hopkins, of Philadelphia, who reports a case of severe injury, in which continued suppuration had gradually undermined a vigorous constitution, hectic had set in, and the patient was rapidly weakening. Assuming that a sufficiently large granulating surface might be made use of with benefit as a means of administering nutritive ma-

terial without interfering with the processes of cicatrization, an emulsion of cod liver oil, with five grains each of pepsin and pancreatin to the ounce, was employed as a nutritive dressing. The ulcer was dressed once a day with lint saturated with the oil. A very decided change, both of the general and the local conditions, was observed to take place; the effects upon the ulcer being clearly secondary to the benefit to the general condition, as no change was noticed in it until after marked improvement in the latter had occurred. After improvement had begun, the cicatrization progressed with remarkable rapidity.

As the general treatment was not changed, we see no reason to doubt that the successful issue of the case was brought about by the nutritive dressing, and we coincide with Dr. Hopkins in that, although positive tests of this plan of treatment are necessary in order to estimate properly its value as a therapeutic means of combating the exhaustion due to excessive suppuration from extensive loss of cutaneous tissue, should the tests corroborate the evidence adduced in the case cited, the method will be of great value, especially in extensive burns, in which life is often lost because of the inability of the digestive system to supply sufficient nourishment to compensate for the great waste of the excessive suppuration.—*Med. Med. Jour.*

The Field and Limitation of the Operative Surgery of the Human Brain.

At a recent meeting of the American Surgical Association, Dr. JOHN B. ROBERTS, of Philadelphia, presented a paper on this subject. The following abstract (*Medical Record*), gives an excellent idea of its contents:

1. The complexus of symptoms called

"compression of the brain," is not due so much to displacing pressure exerted on the brain substance, as it is to some form or degree of intracranial inflammation.

2. The conversion of a closed (simple) fracture of the cranium into an open (compound) fracture by incision of the scalp, is, with the improved methods of treating wounds, attended with very little increased risk to life.

3. The removal of portions of the cranium by the trephine or other cutting instruments is, if properly done, attended with but little more risk to life than amputation of a finger through the metacarpal bone.

4. In the majority of cranial fractures the inner table is more extensively shattered and splintered than the outer table.

5. Perforation of the cranium is to be adopted as an exploratory measure almost as often as it is demanded for therapeutic reasons.

6. Drainage is more essential in wounds of the brain than in wounds of other structures.

7. Many regions of the cerebral hemispheres of man may be incised and excised with comparative impunity.

8. Accidental or operative injuries to the cerebral membranes, meningeal arteries, or venous sinuses should be treated as are similar lesions of similar structures in other localities.

9. The results of the study of cerebral localization are more necessary to the conscientious surgeon than to the neurologist.

An elaborate table of the proper points for trephining in various cerebral lesions was then given.

These principles of the operative surgery of the brain were then applied to the treatment of—

A. *Cranial Fractures*.—Closed (sim-

ple) fissured fractures : 1, No evident depression, no brain symptoms—no operation ; 2, no evident depression, with brain symptoms—incise scalp and trephine ; 3, with evident depression, no brain symptoms—incise scalp and possibly trephine ;* 4, with evident depression, with brain symptoms—incise scalp and trephine. Closed (simple) comminuted fractures ; 5, no evident depression, no brain symptoms—incise scalp and probably trephine ;† 6, no evident depression, with brain symptoms—incise scalp and trephine ; 7, with evident depression, no brain symptoms—incise scalp and trephine ; 8, with evident depression, with brain symptoms—incise scalp and trephine. Open (compound) fissured fractures ; 9, no evident depression, no brain symptoms—no operation, but treat wound ; 10, no evident depression, with brain symptoms—trephine ; 11, with evident depression, no brain symptoms—possibly trephine ;* 12, with evident depression, with brain symptoms—trephine. Open (compound) comminuted fractures ; 13, no evident depression, no brain symptoms—probably trephine ;† 14, no evident depression, with brain symptoms—trephine ; 15, with evident depression, no brain symptoms—trephine ; 16, with evident depression, with brain symptoms—trephine. Punctured and gunshot wounds ; 17, in all cases and under all circumstances, trephine.

B. Intracranial Hemorrhage.—Trephine for the removal of clot and arrest of bleeding when the probable seat of hemorrhage is ascertainable, and the clot is believed to be a localized one.

C. Intracranial Suppuration.—Tre-

phine and make, if necessary, exploratory punctures in all cases of abscess.

D. Epilepsy following Cranial Injury.—Remove portion of cranium in selected cases.

E. Insanity following Cranial Injury.—Remove portion of cranium in selected cases.

F. Cerebral Tumor.—If can localize it, and if it is probably superficial, remove bone ; and excise growth, if it is found.—*Coll. & Clin. Record.*

Tamponing the Nasal Fossæ with Plugs Soaked in Turpentine.

DR. L BODEIR, in the *Jour. de Méd. et de Chir. Pratique*, for May, 1885, praises this as a simple and efficacious process, which he has often employed to arrest nasal hæmorrhage. This method occurred to him after a case in which he had used Belloc's sound, and plugged the nares so effectually that for ten days, the blood, not being able to escape anteriorly or posteriorly, welled up through the lachrymal canals ; two little streams of blood running down the cheeks for about eight days. The case was one affected with slight fever, but resulted in the formation of petechiæ, intestinal hæmorrhage and death. Comprehending from this that tamponing alone would not suffice, and satisfied of the insufficiency of perchloride of iron, he made a tampon of small balls of wadding attached to each other by a string, like the tail of a kite (in other words, the old classic vaginal tampon), soaked the balls in turpentine, squeezed them afterwards, and filled the anterior nasal fossæ with them, without regard to the posterior fossæ, which remained open. The heat causes a part of the turpentine to vaporize, and the most inaccessible folds of the fossæ come under its irritating influence, and by this means he has treated success-

* In classes 3 and 11 he would be inclined to trephine if the depression were marked, or the fissures sufficiently multiple to approach the character of a comminuted fracture.

† In classes 5 and 13 he would trephine, unless the comminution were found to be inconsiderable.

fully twenty or more cases under diverse circumstances. — *Four. Amer. Med. Assoc.*

Laparotomy for Intestinal Obstruction the Mode of Operating.

In a clinical lecture published in *British Med. Jour.*, Dr. J. Grey Smith concludes as follows :

I venture to submit to you these rules, for your guidance, in opening the abdomen for the relief of acute intestinal obstruction.

1. Make the incision in the middle line below the umbilicus.

2. Fix upon the most dilated or the most congested part of the bowel that lies near the surface, and follow it with the fingers, as a guide to the seat of obstruction.

3. If this fail, insert the hand, and carry it successively to the cæcum, the umbilicus, and the promontory of the sacrum.

4. If this again fail, draw the intestine out of the wound, carefully cover it, until increase of distention or congestion, or both, in one of the coils, gives an indication that the stricture lies near.

5. If there be considerable distention of the intestines, evacuate their contents by incision, and suture the wound. Never consider an operation for intestinal obstruction inside the abdomen finished until the bowels are relieved from over distention.

6. Be expeditious, for such cases suffer seriously from shock. The whole operation ought to be concluded in half an hour.

VENEREAL DISEASES.

A New Phimosis Forceps.

By Dr. WALDO BRIGGS. The superiority of these forceps over others designed for the operation of Circumcision

consists in the simplicity and celerity of the operation as performed with them ; the comparative freedom from hæmorrhage and the exactness of the coaptation of skin with the membrane when sutures are in, which will almost insure healing of the wound by the first intention.

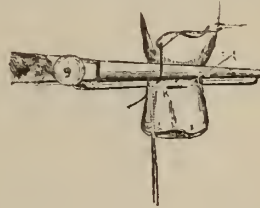


FIG. 1.

Figure 1—Represents the first step of the operation; the forceps in position showing probe within the prepuce laterally and needle passing to inner side so as to prevent making a suture through the skin only. Any desired number of sutures may be passed, but it is only necessary to have three, which on division of the loop makes six sutures, three on each side.

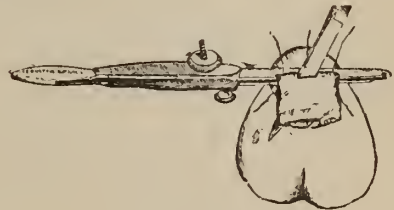


FIG. 2.

Figure 2—Shows sutures in position and foreskin transfixed above the guide or extra blade.

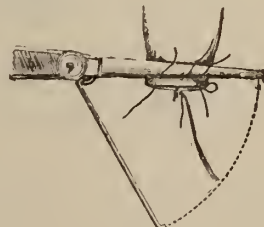


FIG. 3.

Figure 3—Represents the division of the foreskin, and hook (a probe or tenaculum may be used) drawing up the

loop in the centre or between the membranes. These loops may now be divided and the sutures tied on each side. The forceps being held laterally obviates any constriction of the membrane in the majority of cases; but should there be any, it can be remedied by dividing the membrane on the dorsum between the sutures.

An Almost Painless Method of Introducing the Catheter.

Dr. JOHN A. STAMPS recommends, in the *Medical and Surgical Reporter*, the following as an almost painless method of introducing the catheter, when there is a hyperæsthetic condition of the urethra. His plan consists in introducing the nozzle of an ordinary male urethral syringe, previously filled with water as warm as the patient can bear, into a soft catheter, and injecting the water slowly as the catheter is gently passed along the urethral canal. The water regurgitates between the catheter and the urethral wall until the catheter has reached the prostatic portion of the urethra, and there is thus little danger of much water passing into the bladder, and the warmth of the water will, in many cases, serve to allay irritability, which so often interferes with the performance of catheterization.

Phytolacca Decandra in Orchitis.

Dr. W. O'DANIEL (*Atlanta Med. & Surg. Jour.*). For several years past I have adopted the following plan of treatment: If there is much inflammation and swelling of the affected parts, I usually have the patient to stand on his feet, which increases the already turgescient condition of the scrotal veins, when I puncture them, thereby relieving, to some extent, the abnormal congestion by the free escape of blood from the distended veins.

After which I advise patient to remain in bed and take from four to six drops of the fluid extract of *phytolacca decandra* every three or four hours, until the specific effect of the drug is at least partially had. I then lessen the dose or lengthen the interval, according to circumstances. This, with an ointment of belladonna and *phytolacca*, applied to the swollen and inflamed parts, with an anodyne, if necessary, to relieve pain and promote rest, and a well fitting suspensory bandage after convalescence, constitutes the most satisfactory treatment known to me.

Cocainisation of the Bladder.

Dr. P. BRUNS, of Tübingen, records a case of litholopaxy in which the bladder and urethra had been rendered insensitive by cocaine. The patient had suffered from symptoms of stone for four years, and, on sounding, the stone was found to be hard and rough, and two centimetres and a half in diameter. There was also considerable purulent cystitis. As a preliminary measure the bladder was washed out with boro-salicylate solution; then twenty grammes of a two per cent. solution of cocaine were injected into the bladder, and ten grammes into the urethra. By shifting the position of the patient the contact of the injection with all sides of the bladder was ensured. After a few minutes' interval the bladder was filled with the boro-salicylate solution, and the operation proceeded with. Owing to the hardness of the calculus, thirty-three crushings were necessary, occupying twenty-two minutes; but during the whole period no pain was felt, although previously the patient had hardly borne the passage of a catheter. During the evacuation, pain was experienced each time the bladder was distended, but the

anæsthesia had lasted for half an hour. Finally, a small quantity of a ten per cent. iodoform glycerine solution was injected, with a view of protecting the abraded bladder from purulent absorption. The calculus, which was of the oxalate mulberry variety, weighed four grammes. A speedy recovery ensued.—*Lancet*.

Belladonna Injection for Gonorrhœa.

Some thirteen years ago, an officer on board one of the vessels of the Indus Steam Flotilla consulted me for a bad gonorrhœa, with intense pain on micturition, and intolerable chordæ at night. The case was urgent, and I ordered an injection composed of seven ounces of water, an ounce of mucilage acacia, twenty grains extract of belladonna, and twenty grains of sulphate zinc, a teaspoonful to be injected immediately before and after micturating, and a similar amount the last thing at night; great care to be used in passing the injection fully down as far as the pain is most intense. An ointment of spermaceti and mercurial ointment, four drachms each, and ten grains extract belladonna, ten grains powdered opium, as a paste to be smeared along the perineum and around the crura penis at night. Patient left next morning, having had no chordæ that night, and the pain of micturition disappeared by using the injection. Within a week there was complete cure. From that time I have had numerous gonorrhœal cases of every type and stage, and without exception with unfailing success. Not long since a shop assistant presented himself with a bad gonorrhœa, high fever, inflamed testicle and chordæ at right. With the application of the belladonna and opium ointment the chordæ did not appear, and in four days after using the injection the running ceased, but after the

first application the pain and running were much lessened. A suspensory bandage was worn, and with the daily use of the mercurial and belladonna and opium ointment the patient was quite well in three weeks. Patients have always stated that it is the injection, and not the ointment, which stopped the chordæ. I have tried the anodyne treatment in various classes of people, from the dissipated paupers of the Eastern bazaars to the well-fed *roue* in the West; in the acute and in the chronic and gleety stages; in first attacks and in those making one of a series; and in cases complicated with inflamed testicles and chordæ; and I have no hesitation in saying that I have not witnessed anything to contra-indicate it nor to mitigate its success.—*Medical Press*.

Diagnosis of Chancre of the Tonsil.

Dr. FRANK DONALDSON, JR., gives the diagnosis of chancre of the tonsil as follows:

Syphilis.

Functional Symptoms.—Deglutition and swallowing painful, but rarely impossible, with freedom from pain when the parts are at rest.

Physical Signs.—Some hypertrophy with early superficial ulceration in primary sore. The tertiary ulcer perforating and cone-shaped. Comparatively slight glandular enlargement, not painful, and subsides with the cause of the irritation.

Hemorrhage rare.

Slight emaciation.

Amenable to treatment.

Cancer.

Functional Symptoms.—Difficulty and pain in swallowing the first and constant symptom, increasing until it is impossible to take food. Lancinating pain referred to the ear.

Physical Signs.—Great hypertrophy,

later wide spread ulceration. Considerable glandular enlargement and induration, which become very painful, and do not disappear.

Hemorrhage frequent.

Great emaciation.

Not cured by any treatment.

Tonsil chancre may, under some circumstances, be taken for a mucous patch, whose favorite seat would seem to be upon the surface of the tonsil; and this is more likely to happen when the patient is seen for the first time, and secondary symptoms have already manifested themselves, and an ulcer still remains upon the tonsil; or when there is hypertrophy of the tonsil, with an active, and by no means superficial, ulceration of the mucous patch. The mucous patch, however, always follows the roseola; and the patch is, as a rule, superficial and of characteristic appearance, etc. To determine finally between a chancre and a mucous patch upon the tonsil, Diday says: "Cauterize the ulcer twice at an interval of five days, and if it is a secondary ulcer, it will disappear; if a primary, hard chancre, it will not."

In exceptional cases, chancre of the tonsil is complicated by an extensive slough. The presence of a grayish ulcer, surrounded by an œdematous circle, with inflammation of the surrounding parts, points strongly to a gangrenous throat affection, either of a syphilitic origin or a primary gangrenous angina, such as is described by Gubler and Trousseau. The limitation of the ecchymotic spots, and the absence of its propagation to the pharynx, palate, and larynx, and the general course of the affection, with the appearance or non-appearance of secondary eruption, will settle the diagnosis.

Ulcerating, gummy tumor of the tonsil is distinguished from chancre by

a deeper ulceration, and by its dug-out edges. According to Legendre, a good differential sign is the existence of an erythema and peripheral engorgement, which are never found in gummy tumors, but always present in throat chancre. Further, a knowledge of the patient's antecedents will be of great value.

Finally, if the lesion upon the tonsil has been of slow unilateral development, is superficial, with grayish-white deposit; if there is a history, or even suspicion of syphilitic exposure; if there is glandular enlargement; if the sore on the tonsil appeared from fifteen days to three weeks after exposure, and there is absence of chancre elsewhere; if the patient has not been subject to simple tonsillar angina; if the pain is on the affected side, has lasted for some days or weeks, and has not excited febrile reaction, and the whole is followed in due time by an outbreak of secondary symptoms, certainly we are justified in a diagnosis of chancre of the tonsil.—*Med. News.*

Treatment of Urethral Stricture.

Before the West London Medico-Chirurgical Society (*Med. Times*), Mr. F. SWINFORD EDWARDS read a paper on this subject. After tracing the history of the treatment of this affection from the time of John Hunter, the author drew attention to the normal size of the urethra, and stated that he fully agreed with Otis in his views obtained from measurements of this canal by the urethra-metre. He next spoke of contraction of the orifice, and showed how often this was the cause of a persistent gleet.

Mr. Edwards divided stricture (organic), into two great classes, viz., strictures of the penile urethra and strictures of the fixed or bulbo-membranous

urethra. For the first variety he recommended free division by means of the dilating urethrotome, and at the same time stated that sometimes after this treatment an impassable sub-pubic stricture would after a time disappear, showing that it was spasmodic in nature, and kept up by the anterior co-existing contraction.

After stating that gradual interrupted dilatation should always first be tried, gradual continuous dilatation was spoken of and condemned as often giving rise to inflammatory complications, amongst which was cystitis, for the cure of which internal urethrotomy had more than once been successful. Rapid dilatation, as performed by Harrison's modification of Holt's dilator, was strongly recommended in cases of sub-pubic stricture where a cutting operation was unadvisable.

In discussing internal urethrotomy in cases of deep-seated stricture, Teevan's modification of Maisonneuve's urethrotome was extolled. Mr. Swinford Edwards had performed internal urethrotomy by means of this instrument in nearly thirty cases, with invariable success. During the past three years there had been 142 cases of internal urethrotomy at St. Peter's Hospital, with three deaths only, two of these cases dying from accidental causes which would probably not recur. In the third case there was old-standing suppurative nephritis. Suppression of urine was the after-complication most to be dreaded in these cases. The means to ameliorate this having been laid down, the above statistics were then compared with those given by Erichsen, viz., twenty-six of internal urethrotomy in five years, with four deaths; eight cases of perineal abscess, besides extravasation of urine in one epididymitis in four. In this hospital Maisonneuve's

urethrotome is not used. Holt's immediate method was not favorably criticised. External urethrotomy was considered more dangerous than internal, and Mr. Edwards said that it ought to be limited, except, possibly, in some cases of traumatic stricture, accompanied or not by urinary fistulæ, to cases of impassable stricture, which ought now-a-days to but few and far between. looking to the great improvement which has of late years taken place in bougies. In conclusion, the author dwelt upon the importance of being able to recognize the presence of stricture of large calibre situate in the penile urethra, such a condition being quite sufficient to keep up a chronic urethral discharge, to cause vesical irritability and other urinary troubles, not forgetting spasmodic stricture in the deep urethra. If this anterior stricture of large calibre admits of treatment by bougie, *i. e.* if one is able to restore the urethra to its normal size by this means, well and good; but if not, immense benefit will be derived from dilating urethrotomy in careful hands.

DISEASES OF THE EYE AND EAR.

On the Use of the Galvano-Cautery in Eye Diseases, Especially in Destructive Processes of the Cornea.

DR. A. NIEDEN, of Bochum, has written a paper on this subject, which has been translated by Dr. J. B. McMahon, of New York, and is to be found in the *Archives of Ophthalmology*. The application of the actual cautery was introduced into ophthalmic practice about ten years ago, yet it did not take a firm hold on the profession, and it was only after the pathologic-anatomical recognition of the infectious character of most of the destructive ulcerative processes in the cornea, and the finding of

the cause of the disease to lie in the mycotic action of fungi in the corneal parenchyma, that the galvano-caustic method was strongly recommended (Sattler, 1883) as a most powerful antiseptic agent.

Dr. Niden has been using this method for a year past in about 140 cases, embracing serpent or rodent ulcers, scrofulous abscesses, both marginal and central, the frenulum phlyctenulare with a patch of infiltration at the apex, the parenchymatous corneal abscesses occurring in trachoma, and in xerosis corneae. He reviews a hundred of these cases, and then passes to consider the form of instrument to be employed and its mode of application. He prefers Sattler's small galvanic-caustic apparatus to the Paquelin thermo-cautery; his objection to the latter is partly on account of the greater complication of the technical apparatus, a spirit lamp, continuous blowing, etc., being necessary in its employment, and occasioning great inconvenience to physician and patient; but mainly because we cannot get a white-hot tip sufficiently delicate to allow of the nice manipulation necessary for working in a district of no more than a millimetre in extent. This neat manipulation is possible only with the galvano-caustic loop, which is brought to a red heat at the exact moment when it is needed and cools as quickly, and which, moreover, produces no annoying light-effects by the slight glowing of the thin wire. As a substitute for Sattler's key, Dr. Niden has had a point made (of which he gives a cut) which makes it possible to use the handle and point as a lever in the hand of the operator, who can then conduct his manipulations more safely and rapidly. The operator holds the instrument, which is connected with a powerful Grenet element, in such a

way that the handle rests on some point situated below the eye of the patient, its point at the same time corresponding with the centre of the ulcer. The current is then closed. When the point glows on releasing the button, a slight lever movement is sufficient to press the point rapidly and surely into the tissues to be destroyed, and by a rapid circular movement, without lifting the instrument, the whole border of the infiltration can be destroyed. He gives in conclusion the following résumé.

1. The use of the galvano-cautery is always indicated in affections of the cornea which take their origin in mycotic infection.

2. In such cases it gives the most thorough disinfection of the floor and edges of the ulcer, and at the same time stimulates the process of repair.

3. This process of repair is shown, almost at once, in the increased diffusion power of the corneal tissue, the clearing of the aqueous humor, dilatation of the pupil, and absorption of the hypopyon.

4. In most cases, also, it does away with the necessity of the corneal incision, because when the evacuation of the contents of the inner chamber is required, it can be effected by means of the heated loop. Above all, the cautery can be immediately resorted to when the malignant nature of the process is evident, and accords with the maxim, "*Principiis obsta.*"

5. The operation causes but slight pain, no assistant is needed, anæsthesia is unnecessary, and the treatment is available in the treatment of patients at the polyclinics.

6. A rapid disappearance of the ciliary irritation is almost always observed. The duration of the healing process is considerably lessened. The final result gives a much less extensive and dense opacity of the affected corneal tissue

than is found after the use of the other methods.

7. The mode of applying the heated galvano-caustic loop is exceedingly simple and easy to master—*Jour. Amer. Med. Assoc.*

A Heat Centre in the Optic Thalamus.

Dr. ISAAC OTT, of Easton, Pa., publishes a preliminary note in the *Philadelphia Med. News*, of July 4th, ult., in which he claims to have found a point in the anterior and inner portion of the *optic thalamus* of the rabbit, injury of which was followed by a rise of temperature of from three to four and a half degrees, which was maintained nearly at the same height till the following day.

The Relation between Gonorrhœa and Ophthalmia Neonatorum.

The *London Med. Times* tells us that Drs. LEOPOLD and WESSEL, contribute a paper which, if the facts contained in it are confirmed by other observers, is a very important one. That the ophthalmia of the new-born is due to inoculation of purulent discharge from the mother's vagina is commonly accepted. It is also commonly believed that it is next to impossible to be positive whether a purulent vaginal discharge is gonorrhœal or not. Leopold and Wessel have not been content to rest in this inexactness. In eighteen cases of pregnant women with purulent vaginal discharge they examined this secretion for the gonococcus of Neisser. In seventeen of them none were present; no precautions were taken to prevent the infants of these seventeen from getting ophthalmia, but none of them suffered from it. In one case Neisser's gonococci were found without doubt; the child from this woman on the fourth day had ophthalmia. These researches go to

show that we have in the gonococcus of Neisser a certain test of gonorrhœa; and that gonorrhœa is the actual and true cause of ophthalmia neonatorum; two general propositions, which, if corroborated, are distinct strides in our knowledge.

DISEASES OF THE SKIN.

Xeroderma and Ichthyosis.

Dr. D. F. KINNIER concludes an article in the *St. Louis Med. and Surg. Jour.*, as follows:

Diagnosis.—When the disease is fully developed, mistakes in the diagnosis are not likely to occur. The congenital nature of the disease, with the dry, harsh, non-perspiratory, scaly, ill-nourished state of the skin, showing the peculiar dark caking upon it, are the chief diagnostic features. Ichthyosis may sometimes be confounded with other affections, such as a simple, harsh, ill-nourished skin, and one affected with chronic universal eczema. The local forms must be distinguished from warty growths, and also from a form of seborrhea, which closely resembles ichthyosis cornea.

Treatment.—The disease, though incurable, can be greatly relieved. In the first place the patient must be kept clean and well fed and clothed, if possible. If the patient is run down, cod-liver oil and quinine will be useful. Local remedies are the most important. Great benefit will be derived from baths—and the alkaline baths are most useful for removing the scales; but if the disease is obstinate, a strong alkaline, applied several times a day, will remove the masses. The lotions may be used warm if necessary (potash $\frac{3}{4}$ ss. to aqua $\frac{3}{4}$ viii.), and will readily soften the masses. In the horny form of the disease, a clear surface may be obtained by

careful soaking of the parts with glycerine, or poulticing, or fomenting. When the hypertrophied masses have been removed by the bathing and washing, their reaccumulation must be prevented by continuing on with this method, or by oil or glycerine inunctions, or tar preparations to check the cell growth. After the scales have been removed, an alkaline bath used twice or thrice a week, containing $\frac{3}{4}$ ii. to $\frac{3}{4}$ iv. of carbonate of soda, or bran, to the usual quantity of water, should be used; after the bath the whole body should be smeared over with some oily substance. The simple form may be benefited by olive oil, neats-foot oil, glycerine and water, glycerine of starch; elder-flower ointment is very serviceable. The oleum theobromæ, or cocoa butter, is one of the best remedies when an oily substance is required.

The principal indications in the treatment are: first, to promote an improved nutrition of the body; second, to remove the epidermic masses and dirt; third, to stimulate the circulation of the skin by inunction and friction. I may add here, that the Turkish bath and shampooing will aid greatly the means at our disposal for the removal of the epidermic masses. Mention may be made of ichthyosis of the tongue, which is described by some writers, while others do not recognize it. Dr. Church, of London, has recorded the case of a girl, aged fifteen years, who was affected by the disease on one side of the body, and about the tongue and palate.

Absorbent Power of the Cuticle.

Dr. JUHL has been making experiments on the absorbent power of the human cuticle for fluids in the form of spray. The lower extremities were isolated from the rest of the body by a partition, the opening in which was care-

fully packed with India-rubber so that no fluid might pass to the rest of the body. The spray was then made to play upon the isolated extremity, and only normal skin was exposed to it, all patches which were unduly reddened being covered with gutta-percha tissue firmly fixed with chloroform. The skin was carefully cleansed with soap and water before the commencement of the experiment, and after the spraying the superfluous fluid was wiped off, the leg rubbed with fat, and a close bandage applied, before the limb was removed from its isolation. The drugs used were ferrocyanide of potassium, salicylic acid, salicylate of sodium, iodide of potassium, and tincture of iodine, and all of them were found, in greater or less quantity, in the urine. Alcoholic solutions were found to be absorbed more readily than aqueous.—*British Medical Journal*.

Deelina Oil in the Treatment of Skin Diseases.

Dr. JOHN ROBERTS, of Chester, England (*Practitioner*), gives brief notes of a number of cases of skin diseases, chiefly of an eczematous character, in which he has used "oleum deelinae" as a topical application. He considers it superior to all other fatty substances for the purpose. He never uses it during the acute stage. Before it is applied the parts are bathed with warm bran water or oatmeal water, and then carefully and gently dried. All that is said of the nature of the oil is that it is "another member of the hydro-carbon family," and that it is "manufactured on the banks of the Dee, by the Dee Oil Company, by a process of refining," etc. We find nothing in the article to indicate whether it is a fish-oil, or petroleum product, or of vegetable origin. It is said that it is clean and inodorous, does not become rancid, and leaves little or no greasiness after its application.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Fractures of the Ulna by Indirect Force, and Fracture of the Radius by Twisting.

DR. F. BROSSARD (*Annals of Surgery*), details clinical facts and experiments on the cadaver, from which he draws the following conclusions :

Fracture of the ulna by indirect force, scarcely mentioned by some authors, is a lesion of childhood and adolescence—the reason for its occurrence at this age being found in the constitution of the bones at these periods of life, and the relative ability to resist strain exhibited by the osseous tissue and articular ligaments. This solution of continuity may result from two causes—vertical force or twisting. It results from vertical force when, in general adduction of the limb, the ulnar inclination of the hand makes the ulna the agent of transmission to the carpus of the pressure which it receives ; from twisting, when, by an exaggerated supination, the posterior surfaces of the two bones of the forearm come in contact, and by this contact a force of flexion from before backward is impressed on the ulna.

The seat and form of the fracture vary according to these two mechanisms, and, also in a very notable degree, according to the ages of the persons injured.

The common characteristic of these solutions of continuity is to be incomplete and subperiosteal ; this latter diagnostic point is the only one which can be determined during life.

Since the absence of deformity of the limb and of mobility of the fragments renders these fractures liable to be confounded with osseous contusions, the error is to be avoided by careful study of the producing cause, by the important symptom of a limited swelling, and

by the pain, the fixed locality of which can be explained by no other cause.

This overlooked lesion may be the point of departure of grave inflammatory accidents. It is important, therefore, that it be recognized, and that it be treated by immobilization, which generally will suffice to accomplish a cure.

A twist in exaggerated pronation may determine in the radius a fracture, hitherto undescribed. It takes the form of a fissure, whose track may be spiral. This fissure is often accompanied by incomplete transverse fracture, and sometimes with tearing away of the lower epiphysis.

Transverse Fracture of the Patella ; Aspiration of the Joint ; Suppuration ; Antiseptic Incisions into the Joint ; Subsequent Winding of the Fragments ; Recovery.

MR. RIVINGTON (*Lancet*) : On admission, December 29, 1883, there was much effusion, and a back splint and ice bags were applied ; 31st, attempt to approximate fragments by strapping ; January 11, joint tapped antiseptically with trocar and canula, only two ounces of blood and serum removed, antiseptic dressing and ice ; 16th, attempt to approximate fragments by Malgaigne's hooks inserted into strapping and gutta percha, had to be removed ; 23d, pus oozing from aspirator puncture, joint freely opened and washed out antiseptically ; 30th, antiseptic suture of patella ; March 7, antiseptics discontinued ; March 10, wounds healed. Result when discharged, bony union ; but very little movement. No attempt made to break down adhesions.

The interval between the opening of the joint and the suture of patella was to prevent bringing discredit upon the operation in case sepsis had already occurred.—*Ibid.*

Dislocation of the Fifth Cervical Vertebra; Reduction; Recovery.

DR. GUIDO THOM (*Austral. Med. Gazette*).—Patient fell from a wagon, the wheel passing over him. Symptoms observed—paralysis of right side and of left arm; deviation of uvula to right; dilatation of left pupil; difficulty of breathing, apparently from paralysis of respiratory muscles; marked prominence of 6th cervical vertebra.

Reduction of the dislocation by extension and manipulation produced immediate improvement in breathing, but no change in other symptoms. Paralysis slowly improved, leaving, after six months, only a slight limp. [The case seems to have been complicated by cerebral compression, probably from hemorrhage at base. T.].—*Ibid.*

Compound Dislocation of Elbow-Joint, with Division of Main Artery and Vein.

DR. RUSHTON PARKER (*Lancet*).—Patient, a female, intemperate, fell down stairs; sustained dislocation of elbow; the humerus, stripped of muscles for lower 3 inches, protruding through wound 4 inches long in front of joint; main vessels torn across. The wound was cleansed with carbolic solution, the dislocation reduced, the vessels tied with catgut, the arm wrapped in a gauze dressing, and the elbow fixed in acute flexion, no splint being used. No drainage tube inserted. Wound dressed daily for five days. No pus formed, and healing was complete in four weeks. No movement of joint permitted till after four weeks. A perfectly useful joint resulted. Success due to prompt disinfection of wound, absence of sutures, free opening in skin preventing tension, position of acute flexion (which is superior to splint), and disuse of passive motion, in itself a frequent cause of inflammatory mischief.—*Ibid.*

The Practical Treatment of Fracture of the Lower End of the Radius, com- monly called Colles's Fracture.

JOHN B. ROBERTS (*Polyclinic*):—The essential point in the treatment of this fracture is early and complete replacement of the lower fragment. The protracted convalescence and frequent stiffness of the wrist and fingers, seen often in this injury, are, I am convinced, due to imperfect reduction of the fracture and the confinement of the fingers during the use of the fracture dressing. When there is neither comminution nor loss of tissue by crushing, the fracture can usually be cured in four to five weeks, with little or no difficulty, and without stiffness of the fingers. When comminution and crushing exist, cure without impairment of motion, though probably with more or less persistent deformity, is nearly always possible; and in the same time. When I say "cured," I do not mean that every vestige of swelling and of osseous thickening disappears so soon, but that the limb is capable of performing its ordinary functions. Old and rheumatic patients may perhaps exhibit a greater tendency than others to rigidity of the joints; but I cannot insist too strongly on my belief that stiff fingers are usually an indication of imperfect reduction of the fragments, which, by their projection, interfere with the extensor and flexor tendons, and cause adhesive inflammation.

No apparatus should be applied that restricts, at any period of the treatment, full and free motion of the fingers. In uncomplicated cases the splint need not be worn more than about ten days; provided that the patient is sufficiently intelligent to avoid submitting the arm to unexpected strains and blows. This is because of the slight tendency to reproduction of deformity in the properly re-

duced uncomplicated fracture. In careless patients, and in comminuted or otherwise complicated fractures, support by the splint should be continued for three weeks. I should be willing to treat many uncomplicated patients in intelligent persons without any splints, merely substituting a band of adhesive plaster firmly placed around the seat of injury. Passive motion is probably never necessary, if the fracture is properly reduced, and the play of the fingers not restricted during the use of the splint.

Reduction is always painful, but is usually so quickly accomplished that I seldom use an anæsthetic. Ether or nitrous oxide should be employed, however, if there is likelihood of the pain preventing perfect coaptation of parts. The surgeon must apply force directly to the fragments. Let him put the patient's hand in the prone position, grasp the middle of the forearm with one hand, and take hold of the patient's palm with the other hand in such a manner that his thumb can make strong pressure upon the apex of the dorsal prominence. By making traction on the hand of the patient, and then suddenly flexing the patient's wrist, while at the same time he presses with his thumb strongly upon the projection at the back of the wrist, he can nearly always force the lower fragment into its proper position without difficulty. A repetition of this *mancœuvre* is sometimes requisite before accurate replacement is obtained. The grating produced as the fragment, which may have been impacted, is driven into its normal position, can at times be distinctly heard by bystanders. The limb at once assumes its normal contour. The disappearance of the bony edge, or shoulder, previously perceptible to the touch, where the upper margin of the lower fragment was elevated above the level of the shaft of the radius, is an in-

dication that reduction of the backward displacement has been accomplished. Still further manipulation may occasionally be necessary to reconstruct the normal outline of the radius, which has at the wrist, it will be remembered, a concave palmar surface.

If great comminution or crushing has been incidental to the fracture, *perfect* restoration of shape may be impossible, although the deformity can be greatly diminished. In such cases also, retention of the fragments in good position may be somewhat difficult. Firm impaction, or entanglement of the fragments in the tendons or in dorsal periosteal bands, may require that the hand and attached lower fragment be first bent strongly backward, in order to relieve the interlocking before making traction, flexion and pressure. This preliminary measure is very seldom necessary. After reduction has been accomplished, any form of dressing is allowable, provided it immobilizes the limb, does not tend to obliterate the normal curve of the palmar surface of the radius and permits the patient to move his fingers. It was formerly thought that splints deflecting the hand to the ulnar side exerted traction on the radial side of the wrist, and were therefore indicated. This is incorrect teaching. Such splints are unnecessary, as the deflection only causes the *carpus* to roll in the articular surface of the radius.

The hand should be placed in the prone or semiprone position, and a single splint extending from the elbow joint to the middle of the metacarpus, applied either to the dorsal or palmar aspect of the forearm. It is essential that the palmar splint, if it be chosen, should be convex on its upper surface at its carpal extremity, so as to preserve the integrity of the radial concavity, and not to make the palmar surface of the

radius flat by forcing upward the lower fragment, which has just been pushed down into proper position by the surgeon's manipulations. This convexity of the splint may be obtained by using the moulded splint of Levis, which I employ, or a splint with a hard convex pad, such as that of Carr. It should be seen that the pad properly fits. The surgeon can readily make a pad out of soft wood and fasten it with screws to a straight splint. No dorsal splint is needed with either the Levis or Carr palmar splint. If it is inconvenient to obtain a proper form of curved palmar splint, a flat splint may be applied to the dorsal surface of the radius, for it presents no curve, but is straight. Bond's splint, so frequently employed in Philadelphia, is dangerous to the future contour and utility of the limb, and should *never be used*.

After the splint has been employed for from ten to twenty days, varying, as above stated, with the kind of fracture and disposition of the patient; it is well to substitute it by a strip of adhesive plaster two inches wide, applied circularly around the wrist, so as to give moderate support to the partially consolidated fracture.

If union has already occurred in a fracture treated without proper reduction, I should be inclined to attempt refracture and adjustment, even after the lapse of several months; provided that the fingers were very rigid or the deformity very great. It is not likely that as much can be accomplished in such cases as was possible immediately after the receipt of injury; nor should it be forgotten that very good, if not perfect use of the hand finally is compatible with a considerable degree of deformity. Rigidity of the fingers, if permitted to occur, remains, however for many months.

The Diagnosis of Fractures Near a Joint.

This is oftentimes a very difficult matter, and has frequently caused the sweat of anxiety to bedew the forehead of the most experienced surgeon. Crepitus, deformity and mobility, these classical signs of fracture, Dr. Oscar J. Coskery tells us in the *Med. Chronicle* for July, are not infrequently wanting. But there are three other signs that stand us in good stead; *fixed* pain, the *site* and *quantity* of the hemorrhage, and the *perfect helplessness* of the limb. It often happens, as for instance in fractures of the fibula alone, that we can observe no *deformity*, *crepitus* or *mobility*, but, if we follow the line of the fibula up, at *one* certain point the tip of the finger elicits pain. If this is always complained of whenever pressure is made upon this point, he thinks the diagnosis is plain. The pain is evidently due to the soft parts being irritated by the sharp edges of the fractured surfaces.

The second of these signs, the *site* and *quantity* of the hemorrhage, should be considered thus: The patients whose cases he details, fell, striking upon the *outer* side of the limbs, and ecchymoses slowly made their appearance on the *inner* side, and then in considerable quantity. Had the bleeding been the result of contusion alone, it not only would have appeared sooner, but at the point injured. As it was from the small and non-contractile vessels of the bone, the bleeding was longer in progress than it would have been in the soft parts, where, very probably, a larger vessel would have been ruptured. Again, during this slow bleeding the blood had time to gravitate to a dependent position, or direction of easiest escape.

The absolute helplessness of that portion of the limb that contains the broken bone is, probably, the most important

of these signs. The fact that a patient has not made a step after the accident, or raised his hand above his head, is a strong point to start from in attempting the diagnosis.

There is one mistake that he has several times seen made in diagnosing fractures of the femur. When the patient is told to raise his thigh from the bed he can do so by contracting the hamstring muscles, sliding the heel upon the bed, and thus the lower end of the femur is pushed up by the head of the tibia; but the *psoas-magnus* and the *iliacus* do not contract.—*Med. and Surg. Reporter.*

Fracture Dressings.

DR. CHAS. DOUGLAS (*Med. Age*). Fractures of the forearm are more frequent in ordinary practice than fractures of any other part of the body. Of fractures of the forearm three out of every four occur within one or two inches of the wrist joint, and most frequently are confined to the radius alone. Under the ordinary dressings as applied, great difficulty is encountered in making perfect recoveries. The hand is drawn forcibly to the radial side and thus causes a projection of the carpal head of the ulna on the ulnar side, and a corresponding depression of the broken fragments of the radius towards the ulna. Too frequently do we find that this deformity is perpetuated when union has been restored and the patient dismissed as cured. This happens to a greater or less extent in almost every case treated, thus leaving, in some cases, an unsightly deformity and also impaired utility. The deformity is permanent and the disability lasts for months at least; sometimes it is also permanent, especially in people of advanced age.

This deformity is frequently due to impaction of the proximal end of the

fractured bone into the distal end, and may be unavoidable, as in old people, where loosening of the impaction may be unsafe practice. In such cases, deformity with reduced utility, is a sure result under any form of treatment.

This impaction frequently leads to grave mistakes in diagnosis. The absence of crepitus causes the fracture to be mistaken for a severe strain. This is more likely to happen when some hours have elapsed between the time of the injury and the examination of the surgeon, great swelling having deformed the injured limb. Perhaps in some instances the surgeon sizes up the deformity, and after manipulation with no perceptible crepitus, concludes he cannot make it any better with splints. He then applies some cooling, anodyne lotion and bandages, and thus perpetuates the deformity. There are instances where this would be unavoidable in any surgeon's hands, but generally it is doubtful practice. In all cases of injury near the wrist, the surgeon should remember that an unusually projecting ulnar head with swelling of the soft parts around the joints or on either side of it, even if there is no other symptom, is grave cause for suspicion. Most frequently fracture is the cause. Many times this cannot be found without using considerable force, and chloroform may be needed before success is obtained, as the bones are firmly impacted.

The propriety of using such force has been and may still be questioned in many cases, as the appliances for repairing the damage have not always been equal to the emergency. There are few surgeons, if any, who, in a practice extending over twenty years, cannot recall cases of radial fracture, which have resulted badly, even after the greatest care and most approved dressings have been sedulously applied. This fact is dis-

couraging to old as well as young surgeons, and no doubt has done much towards allowing impactions to remain as such, when the deformity is not too great.

If a successful method of dressing such fractures were generally known, and recognized as such, only slight, if any deformity, would be allowable as the proper result in treating such cases.

It is not my purpose to criticise or compare the existing appliances in daily use and recommended by all writers on the subject. The difficulties arising in their application, and the greater difficulties existing in keeping up a proper, continuous, and successful application of the dressing selected, are not to be wondered at, when we consider the yielding nature of bandages, the swelling and subsequent shrinkage of tissues, the anatomy of the parts involved, and the ever-contractile nature of the many muscles attached on both sides of the fracture. The continued contraction of those muscles, coupled with the great difficulty in keeping up continued extension, no doubt accounts for the bad results we witness in many cases, which cannot be explained on the ground of impaction. The ever varying shape and size of the arm also causes the greatest difficulty in applying splints that shall be a proper application without in any way tending to displace the broken fragments. The shape and formation of the hand offer great obstacles to continued counter-extension, one of the most necessary features in this, as in mostly all other fractures.

In the forearm we have the hand supported on one side by the radius and the other by the ulna, with the flexor and extensor muscles continually dragging the hand towards the elbow. This muscular effort is frustrated by the rigidity of those bones. As soon as either of

them is broken the power of the muscles is in the ascendant, and drags the hand towards the fractured side and the elbow, thus displacing the fracture. This causes a projection of the end of the sound bone on the opposite side. Such displacement, with the swelling and crowding of the soft parts, is the injury with which we have to contend. Moderate extension of the hand with manipulation of the fractured ends will generally reduce the deformity, when impaction has not occurred, or great swelling is not present. Impaction, if present, should be removed by force, except in the old, where there is doubt of the healing power in the patient.

Success in treating fractures involves two necessities. The first is to thoroughly and perfectly return the fractured bones to their normal position, and the second is to hold them there till union is effected. The first can generally be accomplished in a short time; the difficulty arises in carrying out the second.

All appliances that have been used or recommended, involve more or less movement of the limb, and consequent liability to displacement of the fracture during their application; thus leaving some doubt about the perfect adjustment of the fracture ends after the dressings are applied. Even if there is perfect adjustment of the fracture, there is no one of the dressings in use that can carry out the second indication needed for success, without more or less failures. The slightest stretching or loosening of the bandages, which are a necessary part of every dressing used, allows the ever contractile muscles to cause displacement, and fortunate is the surgeon who succeeds in treating Colles' fracture without some deformity, and at times impaired usefulness.

Realizing these difficulties, I was in-

duced to try the effects of plaster-of-Paris in treating these fractures. After several efforts in different forms (all more or less encouraging), I arrived at the following method of applying it. The requisite articles are pasteboard, plaster and warm water.

The pasteboard must be broad enough to nearly encircle the arm just below the elbow, and long enough to extend from the elbow to the phalanges. It is applied around the arm in a dry condition, fitting closely around the upper forearm and leaving a half inch space between the arm and the pasteboard around all the lower parts, and an open space from one end to the other an inch or more wide along the upper side of the arm. This is held around the arm by a strip of cotton tied around near each end. The plaster-of-Paris and water are now mixed in a large bowl, in sufficient quantity to fill the space between the pasteboard and the arm, and made liquid enough to pour, or of the consistence of gruel.

The surgeon now grasps the fingers firmly, and close to the pasteboard as possible, and makes steady extension with one hand, while he manipulates the fracture with the other through the open space on the top, or through a hole in the pasteboard, if necessary. When he has secured perfect adjustment of the fractured ends, he holds them while an attendant pours in the soft plaster and fills all the space between the arm and pasteboard and covers the arm with it also. Extension and adjustment are retained till the plaster solidifies. Then the holes are filled in where the fingers left a space in adjusting the fracture, and finally, extension is relaxed. The patient is now free from all pain and will continue so till union is complete, except a feeling of tightness which is present when the swelling is greatest. This,

if severe, I relieve by a few doses of morphine.

The only objection to this dressing is the weight, but patients cease to complain of this after the second day. When it is desirable to make the dressing more presentable in appearance and lighter in weight, this can easily be accomplished by paring away all roughness and superabundance of plaster before the hardening process is complete, or rasping it off afterward, and applying an ordinary bandage with some flour paste. This makes a perfect splint, and a good finish, without the extra weight.

It is important to make the plaster thin when mixing, in order to secure a perfect splint on the lower side of the arm, as it does not pour well otherwise. A little cotton packed around the hand inside the pasteboard will prevent the plaster running out at the lower end, and the close application of the pasteboard to the arm leaves no space at the elbow.

A splint made in this way is a perfect fit at all points, and the bones are thus prevented from moving from the position in which they are placed. After the first week, or ten days, the plaster may be broken off as far as the wrist joint and thus leave the patient free use of his hand; avoiding in a great measure the stiffness of the joint, consequent upon long confinement. The remaining portion of the splint remains on the arm till recovery is complete, from four to five weeks. Where great swelling has occurred before the first dressing, it might be desirable to apply a second splint when this has subsided, but I have not found such a case during the four years I have been using this dressing. I use it with patients of all ages, and in all fractures of the forearm. In two cases of compound fracture, it gave good results, the wound healing at once and causing no trouble.

Where the fracture is three inches from the wrist, the plaster need not pass the joint, as the perfect co-aptation prevents contraction of the muscles by allowing them no room to bunch up in such contraction. This will allow the patient free use of the hand all the time, and avoid the stiffness of the wrist.

These splints give such complete comfort and support, that, the patients in three instances did not return, but removed the plaster after a month, to find the arm all right.

Where there is much hair on the arm, an application of castor oil or tallow will cause it to lie close to the skin, and thus avoid its being entrapped in the plaster.

All cases treated in this way gave the best results, and some showed no deformity whatever. Good motion followed always and one boy had almost perfect use of the arm and hand as soon as the plaster was removed. He could put on his hat or take it off, showing very little difficulty in using the limb.

I have found the following advantages in using this splint :

1. Ease of application.
2. Perfect adjustment.
3. Continued extension.
4. Perfect fitting splint.
5. Freedom from pain.
6. Use of the hand after the first week always, and from the beginning in many cases.
7. Good motion in the wrist joint when the treatment is finished.
8. No slipping of the dressings from the first position. This is greatly due to the strong adhesion of the plaster to the skin, which continues till the splint is removed.
9. One dressing is sufficient.
10. Superior results.

Upward Dislocation of Patella.

Dr. S. W. DODGE (*Peoria Med. Monthly*) :—John W., Irish, single, age 30, almost a giant in physical make up, was brought to my office about one hour

after the following accident : He was chopping a large limb from a fallen tree that was lying over an embankment. He was aware that when the limb was severed that it would shoot upwards, and he expected to move in time to avoid a collision, but his expectations were not realized, and ere he was aware of it the end of the limb struck him with great force under the knee-cap of the left leg and he was precipitated down the embankment. Friends brought him to me and on examination I found the patella driven upward nearly four inches, with the ligamentum patella completely ruptured from the patella.

No discolorization of the skin, nor was there any at all afterwards. Now as to treatment. I confess I was in a quandary. My works on surgery simply stated that it was an uncommon occurrence and to treat same as for fracture of patella. I finally hit upon this mode of treatment : Elevated the foot to relax the extensors, manipulated the misplaced bone till I had returned it as nearly as possible to its original position ; an assistant held it firmly while I put on a strip of surgeon's rubber plaster about one inch wide and a foot long, the centre coming over and above the patella, the ends being carried downward and backward and made fast. I then put on figure of 8 bandage, and a temporary splint till I could get one made for better services.

Patient went home with instructions to keep foot elevated and remain quiet. What was my chagrin the next morning to be summoned in haste to learn that he had attempted to walk across the room to breakfast and had fallen, tearing everything loose and the patella apparently higher than at first. I now had a tin trough made to reach from middle of leg to middle of thigh, which, after again putting on the rubber plaster

and figure of 8 bandage, I bandaged firmly to the limb. I reapplied the dressing every two or three days, each time gaining on the patella till now there is only about one-half inch intervening and that is filled with hard callous effusion. In six weeks the splint was removed, patient walking with aid of cane. Now, scarcely a noticeable limp. No stiffness of joint, and very little weakness. There never was very much swelling nor much pain. He is a farmer and was following the plow within two months after the accident.

On a Case of Multiple Melanotic Sarcoma.

Dr. G. P. TENNENT (*Med. Abstract*): —MRS. J., housewife, æt. 30, admitted Nov. 27, 1883, complaining of general debility, great hoarseness, difficulty in swallowing, occasional breathlessness, and more particularly of numerous swellings or growths, existing all over her body, which have a peculiar blue or bluish-black color.

The appearance presented by the tumors is most striking and peculiar. In all, 72 separate tumors are noted. These vary in size from that of a small bean to what is met with in the left arm near the elbow, where the tumor measures over five inches in length and four inches in breadth. The tumors are distributed pretty generally over the body, but the face, neck, limbs, and back are the parts most implicated; the thorax and abdomen the least so. The appearance of some of the tumors is suggestive at first sight of glandular enlargement, but closer examination shows that the tumors do not exist in the situation of glands.

The site of nearly all the tumors can be readily realized in the two illustrations. They also show very clearly the appearance presented by the origi-

nal spot, and many of the tumors on admission, as well as the ulceration or sphacelation of some of the tumors which occurred during her residence in hospital. The appearance presented by the tumors above and below the left eye, and on the outer aspect of the left knee-joint is specially striking.

Careful examination of the tumors clearly proves that different structures are implicated. A few of them seem to be almost wholly cutaneous, some involve both cutaneous and subcutaneous tissues, some are confined solely to the subcutaneous tissue, while with others,



as those on the left forearm, the deeper structures are manifestly involved, and muscular movements are in consequence greatly impeded.

The color presented by the tumors is most striking and peculiar, and varies considerably in degree—some are of a blueish or slate-blue tint, some blueish-black, while others have an intense black appearance.

Patient has some difficulty in opening her mouth, and, as already stated, she complains greatly of difficulty in swallowing, caused by the existence of lumps in her throat. Examination of

the mouth and fauces shows several tumors having the same bluish appearance implicating the fauces, specially on the right side; and one, in particular, of considerable size, situated near to, and partly involving, the right tonsil.

The sputum is abundant, and consists of very viscid mucus, having a brown color and very foul odor. Examination of the blood microscopically shows nothing abnormal. Percussion and auscultation of heart normal. The apex impulse is in the usual position. Percussion and auscultation of lungs normal. The liver, spleen, and thyroid



gland are of normal size, and otherwise present no abnormality. Examination of the urine shows it to be free of albumen and sugar, and microscopical examination only shows a few oxalate crystals, with some epithelial debris. The urine has a somewhat deep amber tint, and a specific gravity of 1030. There is not the slightest enlargement of the axillary or inguinal glands, and the glandular condition elsewhere merits no special comment. Pulse 100, soft and compressible. Temp. 99°.

Some weeks after patient's admission, one of the tumors was excised, and

found to be "a large spindle celled, melanotic sarcoma."

The subsequent progress of the case in hospital was characterized, in particular, by marked increase in the size of many of the tumors, and specially of the large mass situated in the left forearm near the elbow. With this increased growth the skin over a number of the tumors became so greatly distended as ultimately to sphacelate, and this was followed by ulceration and suppuration which continued for a considerable time, the discharge having a greenish-black color and most offensive smell.

Early in February, 1884, one of the small tumors on the left forearm sphacelated, and this was soon followed by a similar condition in the tumors situated above and below the left eye.

Tumors gradually increased in size, and on June 17 patient died.

The condition presented by this woman might, on superficial examination, have been appropriately designated one of multiple cutaneous melanotic sarcoma, but careful examination showed that the subcutaneous tissue and deeper structures were far more extensively involved than the true skin; indeed, even where the latter was implicated, it was usually found to be secondary to the existence of a subcutaneous or other tumor. The condition revealed on *post mortem* examination showed the most general dissemination of those pigmentary tumors.

The absence of any glandular implication is specially interesting in connection with the mode of development of the disease. The greater implication of the left arm and leg, both as to the number of tumors and the extent of pigmentation, is also striking. Hardly any were found on the right thigh, and but few comparatively on the right arm and leg; and it was here especially that

the tumors were met with which presented throughout no discoloration. It is to be remembered that it was in the right armpit that continuous suppuration occurred for nearly three months. The painlessness of the tumors, except where great distention of the skin had occurred, was throughout well marked. The peculiar color of the urine was probably the result of the absorption of melanin, as no tumor was found directly implicating the renal structure. This peculiar color of the urine, however, only existed during the last five weeks of the patient's life.

No importance can be attached to patient's indefinite statement as to her father having died of "black jaundice." There is every reason to believe her statement as to venereal disease.

In conclusion, I must express my conviction that the mode of origin, development, and progress of such a case of melanotic sarcoma strongly indicate the propriety of the more frequent and prompt complete removal of moles or pigmented spots by the hand of the surgeon.

False Reduction of Hernia.

The *London Med. Record* tells us that Dr. P. Berger gives, in two papers which have appeared in the *Revue de Chirurgie*, some illustrative cases and remarks upon this interesting subject.

Commencing with the account of a case of Arnaud's which occurred in 1730, he gives in detail eleven cases which have been published, and one which came under his own notice. Of these twelve, it appears that six were inguinal and six crural herniæ, and in an appendix are added three cases of an allied nature, communicated by Professor Azam, of Bordeaux. Of these, only two (Arnaud's and Berger's) recovered,

and Berger's died after ten days, though the reduction was effected.

On anatomical examination he finds the hernial sac and the proper course of the hernia empty; in the deepest part of the latter is the bend of the strangulated intestine, folded back into the cellular tissue of the iliac fossa in the case of an inguinal hernia; behind the pubes, in the cellular tissue of the pelvis by the side of the bladder, in the case of a crural hernia. It is still pressed upon by the neck of the sac, which may have been divided or not, and it makes its way into the subperitoneal connective tissue, through the opening made by the deep incision of the operation for the relief of the stricture. Sometimes there may be a peculiar anatomical arrangement, such as an exposed testicle, or a fibrous cord like that of the umbilical artery, or adhesions between the intestine and the neck of the sac, which explains the difficulty the surgeon may have had to encounter during the operation, and be a reason why the intestine passes along the course which manipulation and instrumental interference have prepared.

In almost all the necropsies it was found that the cause of strangulation, or at least the obstacle to reduction, had not been removed by operation. Moreover, it is evident that the surgeon often has himself prepared the "false route" into which he has forced the intestine; and Dr. Berger urges that the injudicious force used in attempting reduction is the principal factor in this complex action, the result of which is the substitution of an internal for an external strangulation.

He discusses the symptoms which accompany or follow this accident. Of course, the ultimate absence of relief to the ordinary symptoms of obstruction makes this obvious; but it is important

to notice any features by which the failure can be detected early, and he quotes freely from the experience of Pelletan and others, that the feeling of fullness and firmness of the intestines ought to indicate a state in which no danger exists of the accident occurring when this condition persists after a supposed division of the cause of strangulation. Besides this, the finger introduced into the course of the hernia does not pass freely into the abdominal cavity. The intestine can be distinguished, and may be found not to be freely movable in the peritoneum, but fixed and presenting itself to the finger always in the same position, and in the same character. The author says truly that, the longer the discovery is postponed, the more difficult and obscure the case and its treatment become.

The practical conclusions arrived at may be summarized thus :

1. The surgeon should bear in mind the possibility of the accident and its usual origin from incomplete division of the stricture, or from division of tissues which are not the real cause of strangulation, and from pressure during taxis having been too long or too forcibly attempted.

2. The persistence of symptoms of strangulation points to a false reduction. The special symptoms and signs have been indicated, but two points are specially worth notice. *a.* When the operation has been done several hours, or even a day or two, without the symptoms of strangulation ceasing, can the surgeon distinguish such a false reduction from those cases of pseudo-strangulation due to paralysis of the gut after intense or long-continued pressure? The answer is difficult. False reduction is not followed by even temporary relief of any kind; moreover, the pain is localized, more or less, and the swelling can be made out with careful manipulation.

Then, on searching by the finger in the wound, the intestine is found distended and fixed in position, and the seat of strangulation is not relieved. *b.* When we are clearly in the presence of a false reduction, can we be sure that it is due to displacement under the peritoneum rather than to any other cause? The other cause indicated is adhesion of the gut to the sac. This can only be answered by the careful exploration of the wound.

3. When the existence of the false reduction is made certain, it must be put right, and to do this it is necessary to draw down the gut from its false position to learn the nature of the obstacle, and then to reduce the hernia after proper division of the stricture.—*Med. and Surg. Reporter.*

Dislocation of the Head of the Humerus Downward into the Axilla.—A New Method of Reduction.

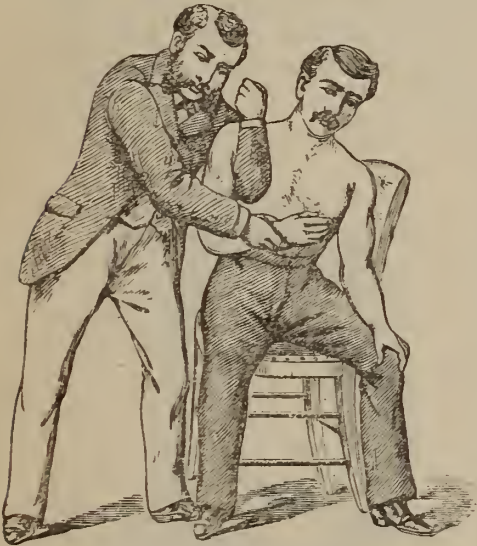
Read before the Washtenaw County Medical Society, by Dr. WM. B. SMITH, Ann Arbor, Michigan.

The paper that I wish to present to your consideration is one on a subject that we all have to deal with in our practice. It is the dislocation of the head of the humerus downward into the axilla. It is not necessary for me to go into a detailed statement of all the symptoms of a case that may be presented to you, for they are familiar to you all.

"The reduction of a dislocated humerus may be conducted on three different plans: by the heel in the axilla, by the knee, or by drawing the arm upwards."

I now wish to present to your careful consideration a fourth plan or way to reduce this dislocation, and as a matter of convenience we will dub it by the name of "Smith's Plan." A man presents himself to you with a downward

dislocation of the head of the humerus of the right arm. He sits down in a chair, you step to his right side, taking your left arm passing under his, bringing it up into the axilla, at the same time grasp about the middle of his forearm with your right hand, carrying it across his chest to the left, at the same time giving it a little rotation while you lift up with your left arm; in this way you can apply most any amount of force that you wish, and you will be surprised with what ease the reduction has been accomplished when you hear the snap of



the bone as it goes to its place. If it be the left shoulder, you will use your right arm in the axilla instead of the left. You simply make a lever of the patient's arm and use one of yours as the fulcrum, while with your other hand you apply the necessary force.

A more full illustration can be seen by the pen sketch which has been so kindly furnished me by Dr. John Miller, who has lately taken up his residence among us.

In looking over the different authorities that I have at hand, I have been unable to find any mention of this plan.

It has worked so well with me that I thought it of importance enough to the profession that I should report it. Some might be very glad to try it after they had failed by the other ways, or to try it on the first occasion.

Another very important point in its favor is the ease with which it can be applied.

VENEREAL DISEASES.

Cocaine in Venereal and Syphilitic Disorders.

The experience of BONO with cocaine in affections of the genital system, as published by the *Gazz. de la Cliniche* (*Thepareutic Gazette*), can be conveniently epitomized as follows:

1. An injection of a few drops of a two per cent. solution of cocaine, removes promptly the pains felt in acute gonorrhœa during micturition and erection. The injection has to remain in the urethra for at least five minutes, and to be repeated four to five times daily.
2. This cocaine injection is unrivalled in rendering caustic injections or the introduction of the catheter painless.
3. The burning pains of blennorrhœa in women yield invariably to small cotton tampons saturated with a two per cent. solution of cocaine, or to the application of a five per cent. solution of cocaine, or to the application of a five per cent. cocaine ointment.
4. Cocaine facilitates the examination of urethra and bladder with the bougie and the endoscope.
5. It allows of a painless cauterization in balanoprostatitis.
6. Pointed condylomata can be painlessly cauterized, excised, or scraped out with its aid.
7. In cauterization and excision of primary syphilitic affections, cocaine

evinced very desirable analgesic virtues of a sufficiently long duration.

8. Taken internally during an antisyphilitic treatment, cocaine did not present any appreciable effects.

9. Its local effects are highly beneficial in syphilitic tonsillitis and in stomatitis mercurialis, and difficulties of deglutition.

Bono refers also to its analgesic properties in acute painful eczema, pruritus vulvæ, sore nipples, and burns.

As Bono's observations were confirmed by Blumenfeld, Frankel, Pick, and Neisser, they are entitled to attention and confidence.—*Weekly Med. Review.*

Treatment of Gonorrhœa.

Gonorrhœa may be successfully treated with the following injection: $\mathcal{R}$ Zinci sulph., grs. xxv. ; bismuth subnit., 3 iss. ; ext. belladonnæ, grs. xx. ; aquæ, $\mathfrak{z}$ viii. M.—Sig. Inject one or two teaspoonfuls four or five times a day, and just before retiring.

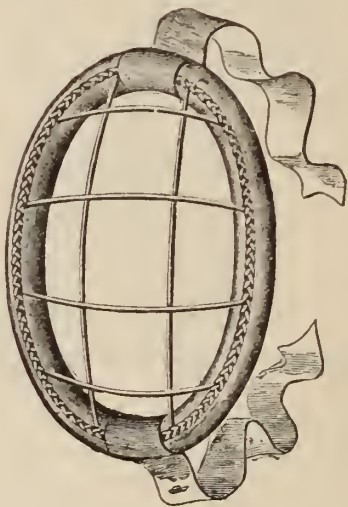
We have found this more generally useful than any other injection we have ever employed.—*Can. Lancet.*

DISEASES OF THE EYE AND EAR.

A Protective Shield for the Eye.

Prof. LUCIEN HOWE, (*Med. Press*) :—The appliance to which I wish to call attention is as simple as it is useful. It consists of nothing more than a wire shield, which, fastened over the eye, prevents any injury to it. This shield is elliptical in form, measuring about three inches long by two and a half wide. Its strength is of considerable importance, and for this reason it is better to have the wire about an eighth of an inch thick, crossed in wide meshes and firmly soldered at the points of contact. The whole is bent so as to be

convex anteriorly, and with slight adjustment can be fitted to the brow and cheek, so as to rest equally upon these parts, making no pressure upon the bandage which may cover the eye. For the sake of comfort, also, it is advisable to have the circumference well padded and covered with chamois skin. It is adjusted in place by having a tape attached to each end of the long diameter, and bound around the head. If necessary, for the sake of additional security, still another tape can be attached obliquely, passing upward over the forehead and downward behind the ear on the opposite side. The whole arrangement is similar to such protective bandages as are sold by some of the instrument makers for binding over the



arm after vaccination. In the general idea there is nothing new, but in its application to ocular surgery I do not think this has received the attention which it deserves. It is especially adapted for protecting eyes of a child after injury from accident or operation. We all know how difficult it is to prevent such a patient from disturbing the bandage or rubbing the eye violently. In many cases it is necessary to tie the

hands to avoid this. But with such a protective shield, the little patient can be allowed the utmost freedom, secure, as we are, that when this is properly adjusted, the eye can receive no injury. It is also useful after operations upon adults ; for example, cataract, artificial pupil, or similar procedures which require opening the globe of the eye. In such cases it is not unusual that the patient, by some accidental violence, or even by turning the head suddenly upon the side of the affected eye, so disturbs the bandage or makes pressure upon the globe as to open a wound which might otherwise be healing. A considerable experience has shown it to be of much practical value.

DISEASES OF THE SKIN.

The Treatment of Hyperidrosis.

Dr. HENRY WILE thus writes in the *Atlanta M. and S. Jour.* for September :

In the matter of treatment, one of the first injunctions to the patient is cleanliness. The milder forms, affecting the axillary, genital regions, palmar and plantar surfaces, usually yield to simple measures, such as the use of astringent washes and powders.

Tannic acid ten to thirty grains to a half pint of water ; extract aconite ten grains to alcohol and ether each four ounces ; a saturated solution of boracic acid ; naphthol ten to forty grains to the ounce of deodorized alcohol, will all be found of value. Painting the parts with pure tincture of belladonna often acts happily. Bulkley recommends for most cases chloral, one ounce to the pint of water. These lotions should be applied freely for three to ten minutes at a time, two or three times a day, according to the severity of the case, each application being followed by the use of some ab-

sorbent powder. The following may also be found to be of advantage :

Salicylic acid, ten grains to the ounce of starch ; burnt alum, one drachm to salicylic acid and venetian talc, each two ounces. Where the skin is in apposition, as in the groins or between the toes, the powder should be used with absorbent cotton. Sometimes a case will resist ordinary measures, and, being obstinate, will require persistent systematic treatment.

In hyperidrosis of the soles, when the simple means indicated above fail to effect a cure, the diachylon ointment treatment, as originally recommended by Hebra, will give satisfaction. Diachylon ointment is composed of litharge and olive oil, in the proportion of one part to four. They are mixed, and allowed to boil slowly to the consistency of an ointment, after which oil of lavender is added in quantity one-tenth the amount of litharge. The ointment is spread on linen and applied to the soles of the feet, which should be previously washed and carefully dried. The plaster may be kept in position by means of a thin gauze bandage or socks. The application ought to be made twice daily for fourteen days, each time the surface of the skin being rubbed gently with dry, absorbent cotton. It is better for the patient to keep a recumbent position during the treatment or walk as little as possible. Water is also to be kept from the parts during the treatment. The old and diseased epidermis gradually exfoliates, and new, healthy surface is exposed. The use of some absorbent powder should be kept up a few days longer. Occasionally the procedure may have to be repeated, but by this means a thorough cure can be effected.

The internal treatment of hyperidrosis consists in the administration of tonics, where these are indicated for the

correction of any debilitated condition of the system. For its direct inhibitory action upon the secretory apparatus of the skin, atropia in gradually increasing doses has been recommended.

Ringworm.

Dr. R. W. TAYLOR (*Western Reporter*), claims good results from painting ringworms twice a day with tincture myrrh, to which four grains of bi-chloride of mercury are added to each ounce.

Hereditary Herpes Zoster.

Dr. G. A. GIBSON, in bringing forward an instance of hereditary herpes zoster, before the Obstetrical Society of Edinburgh, remarked that his reason for mentioning the case was the great attention which he at the present paid to the study of heredity. A gentleman aged thirty-five, was attacked two successive autumns by herpes zoster affecting only the area supplied by a small dorsal branch of the left ulnar nerve. Quite recently he had seen this gentleman's eldest child, a little girl five years old, who was suffering from the same affection confined to exactly the same situation, and following, therefore, the distribution of the same branch of the left ulnar nerve as in the case of her father. Such an occurrence might possibly be regarded as nothing more than a coincidence, but he was inclined to regard it as being the result of a hereditary tendency. It was new in his experience, and he asked Dr. Allan Jamieson if he had ever met with a similar case.

Dr. Allan Jamieson was not aware of any similar case. Still, knowing the pathology of herpes zoster, which only affected nerves with ganglia, either at their root, or in their course, it might be

that a hereditary weakness of this nature could be transmitted.

Dr. Byron Bramwell said the case reminded him of another in which for some generations several members of the same family were affected, all of them at the same age, by blindness, which was shown by the ophthalmoscope to be due to optic atrophy.—*Med. and Surg. Reporter*.

Calomel in Infantile Eczema.

Dr. HENRY T. BYFORD reported to the Chicago Medical Society (*Med. Jour. & Exam.*) his success in the treatment of infantile eczema with calomel, citing numerous cases. He stated that it made no difference on which part of the body the eruption occurred or what the condition of the patient was otherwise. That eczema occurs so frequently in infancy, the large size and great activity of the liver in early life, and the striking action of calomel, had led the author to associate indigestion with infantile eczema as cause and effect. He knew of no authority who had considered derangements of the liver, and its accompanying digestive disorders, as the chief cause of eruptions of the skin, or who had recommended calomel as the chief remedy in its cure. We have seen very good results in infantile eczema following the use of topical applications alone and requiring mothers to refrain from *over washing*. Again, in intestinal derangements causing this troublesome complaint, bismuth will often cause a rapid disappearance of the cutaneous lesions. That calomel is in any sense a specific for infantile eczema cannot be accepted, and we are inclined to think that its good is due more to its property of removing irritating substances from the alimentary tract than from any elective affinity it may have for the liver.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, ETC.

Giant Growth of the Extremities.

By CHARLES GRAEFE, Sandusky, O.
(*West. State Reporter*):

The case I am about to describe is one which has received considerable attention from the lay press, but stands alone, so far as I can gather, in the

ered fifty-three cases; thirty-one being of the upper and twenty-two of the lower extremities; but in all of his cases there is not one where the two lower extremities are affected as in our case; the greater number being single fingers and toes.

F. M.—Age, twenty-five; height, five feet one and one-half inches; weight, one hundred and sixty pounds.

As will be noticed in the accompany-



medical literature of the country. Not so in Continental literature, for we have the records of a number of cases, the first described by Wagner in 1842; this was followed in 1858 by a case in which Chassaignac presented to the Société de Chirurgie, of Paris, since which time a number of cases have been reported by English, French and German writers, and in 1879 Wittelshofer, of Vienna, gath-

ing plate, we have, above the hips, a young lady of well-proportioned figure, while the lower extremities are enormously enlarged, the right foot being eighteen inches long, twenty and one-half inches in circumference at the ball, twenty-four inches at the instep, and the leg twenty-two and one-half inches at the calf and twenty-three inches at the knee; the left foot is sixteen inches

long, twenty inches at the ball, and the leg nineteen and one-half inches at the calf, and twenty-two at the knee; there was a supernumerary toe on each foot, which was amputated in infancy. She is active, perfectly able to do housework, and runs a sewing machine without much trouble.

Accepting Cohnheim's definition of a new growth as that variation of structure where the enlargement differs in its morphological character from the locality from which it springs, we have, in this case, no new growth, as there is a proportionate enlargement of all the parts, bone, muscles, vessels, etc., which enter into the formation of a normal limb. On the other hand, if we consider hypertrophy as that state of a part in which the nutrition is performed with greater activity, so that, on that account, the part acquires unusual bulk, we can consider this an hypertrophy, though congenital, and functionally pathological. Having decided that the condition is congenital it will be necessary to explain its origin.

(1.) In the condition called myxoma we have a purely foetal structure, differing in its histological basis from anything found in the adult human body.

(2.) In the lipoma we have an abnormal collection of cells of the same histological construction as a part of the adult human body, but abnormal in the fact that they do not, in this condition, enter into the *plan* of construction of the body.

(3.) In this case, as has been stated, as well as in many others, we have supernumerary toes.

In the first instance we have a growth differing altogether from the normal adult body in its histological character. In the second we have a cell structure similar to that of the adult body, but not

entering into the general plan of the construction of the body. In the third we have extra members plainly visible, homogeneous in structure but supernumerary.

Going back to the biological basis of all organized beings, the cell, by a process of division, subdivision and growth, we have formed the various types of living beings. This division, subdivision and growth of cells, after a fixed plan, ultimately results in what we call the perfect human body, but by a hypergenesis we sometimes, as has been shown, have supernumerary members produced. As all members have a cellular basis, in such cases we must have supernumerary cells; having supernumerary cells which result in supernumerary members, though of the same type of construction, is it not reasonable to argue that the cellular basis of the myxoma is supernumerary, and being carried from foetal life awaits but an active cause to develop its latent energy and make it grow; or that in the arrangement of the fat cells a supernumerary cell may not be found, which being put in a condition for growth would produce the lipoma?

Finding a reduplication of members, evidence of a supernumerary cell production in the embryo, we can but conclude that the whole enormous growth is due to a foetal supply of supernumerary cells making an enlarged plan of construction and placed in a condition favorable to their fullest development.

In regard to treatment little can be said. When single fingers and toes are affected, amputation would be indicated, and it is suggested that where the whole extremity is found in this condition at birth, continuous compression by bandages might be effectual in preventing so great a deformity.

Two Cases of Fracture of the Spine, with Recovery.

Dr. J. W. STRAWBRIDGE: Edward B., an able bodied healthy man of medium size, about 35 years of age, on May 18, 1882, having done six hours of continuous work, he sat down to rest on the railway track, and was knocked by a passing locomotive into the pool, from which he was immediately rescued, insensible, apparently with a broken neck, and carried to his home.

A few days later, I was called and found the patient on his back in bed, perfectly conscious, suffering but little, without paralysis of body or limbs, his head resting on a pillow, with the face turned strongly to the right, and without power of movement. Having diagnosed a dislocation of the neck, a decision in favor of immediate reduction necessarily followed. Having placed the patient in a sitting posture, Dr. Priestly stood behind him on the bed, and taking his head between his hands lifted steadily until the body was nearly suspended. Dr. Stoner steadied the body while I manipulated the neck. When considerable extension of the neck had taken place, the face turned to the front and the vertebra glided easily into place, but as soon as extension was relaxed, and the head rested on the vertebra, the neck shortened and the face again turned to the right. Upon lifting the head again slowly, a fracture of the third cervical vertebra, through the bifurcation of the spinous process and through the pedicle on the left side was easily discovered. As soon as the head began to rest on the spine, or the erector muscles to contract, the smaller fragment could be felt pressed outward, while the body and right side retained their position; the axis, directed by the right articular facet, glided backward

and to the left, into the vacant space, turning the head around to the right.

Having ascertained these facts, it was decided that as soon as a suitable suspension apparatus could be provided, a plaster splint should be applied to the back and sides of the neck to extend from the shoulders, up under the ears and back of the head. The splint was efficiently applied a day or two later, and worn by the patient four weeks. Becoming impatient of its irksomeness, the patient removed it himself, but found he could not yet do without a support for his head and had to have it reapplied. It was worn for three weeks longer and then permanently laid aside. On the 10th of July he returned to his work, and has never since experienced any inconvenience from the injury.

In February, 1867, John M., a robust healthy man of not over 30 years of age, engaged in mining iron ore, was coming up out of the mine, and seated himself on the front end of an empty car which was being drawn up the slope. The roof of the mine was very low, compelling him to sit bent forward with his head down, but incautiously rising a little, he was caught on the back of his neck and shoulders by one of the roof timbers, which doubled the body on itself, and as the car advanced dropped him backward into it, a crushed and helpless mass. On reaching the surface he was taken out insensible and carried home.

A week after the accident I was called to see him. I found the lower half of the body and extremities paralyzed, the bodies of the seventh, eighth and ninth dorsal vertebræ were crushed into each other, and the sixth and the tenth injured. The heads of the ninth and tenth ribs were dislocated on the right side, and the ninth and tenth on the left. The spine from the sixth to the tenth verte-

bra projected, forming a curve of nearly a semicircle. In this condition he was being moved about in the bed, and raised up when necessary to void his feces, the urine being drawn with a catheter. The attendants were made to understand that he could not be raised up or moved about in bed, and that his only hope for recovery was through maintaining absolute immobility of the spine.

A strong frame was prepared with canvas stretched on it. On this a mattress was fitted with a cavity to receive the curve of the spine; pads were placed on each side so as to keep up a moderate pressure on the necks of the dislocated ribs. A trap was made through the mattress and canvas for removal of the discharges. On this the patient was kept in a horizontal position for thirteen weeks, without other movement than that of being turned slightly to one or the other side to adjust the pads and to cleanse and protect the skin. By that time paralysis had entirely disappeared, the bladder and bowels had regularly resumed their functions, and the bodies of the injured vertebræ appeared to be solidly united. The patient was then allowed to change his position, and soon after to sit up.

At the end of the fifth month he was out of doors walking about apparently well. He has not since suffered from any spinal trouble, has been, and is now, a healthy man. He is somewhat reduced in stature, has a very marked projection of the dorsal spine, and a very stiff back.—*Med. News.*

New Apparatus for the Treatment of Fractures.

Dr. PAUL MEILHAC calls attention to a very practical apparatus for fractures. It is one that is always at hand, and does away with a lot of hooks and bands that are often difficult to use. It

is light, and elegant even, and costs almost nothing. It is simply the small cylinder of wood known as a "cache-pot," made of light slips of wood crossing one another in a diamond shape, that allows the whole to close up or open to surround flower pots. It may be had for a few cents (plain) at any florist's. Opening it and then introducing the member is the work of a moment. It can then be closed, when the angles of the diamonds become sharper, but still leave space enough to see between. A few rows of plaster hold it in place. Of course the fractured member is first covered with a good coat of wadding, at least on two sides. Besides the compression, this apparatus makes an extension, which is due to its construction, and will often prove useful. It also furnishes good, strong points to suspend the member when needed.

Fracture of Humerus by Contre-Coup.

Dr. GEO. E. MONETTE, of New Orleans, thus writes in the *Texas Courier-Record of Medicine*.

Fred. C., of New York, an exhibitor and visitor to our great Exposition, met with the above accident during December last. While riding in our street cars (*en route* to the Exposition), sitting carelessly in the car, with his elbow as far out the window as he could protrude it, the result was that his forearm met an obstruction in a projecting seat of our ordinary wood carts used in the city, striking the ulna about four inches from the olecranon, with such force as to fracture the humerus at the deltoid insertion. The fracture, as also the contusion, did well, until the fourth week, fortunately after union of the fracture, when the most violent periostitis developed at the seat of contusion of ulna. There was an evident exfolia-

tion of the bone, which seemed to have undergone suppurative degeneration, and resumed its normal condition with very little irregularity of its surface. There were a number of sinuses communicating with the contusion and a slight abrasion, which terminated in an ulcerated condition. These were broken up by lotions of tinct. iodine co. and carbolic acid (3 j. āā ad. oj.). Recovery was good and complete at the expiration of two months.

Excision of the Astragalus.

OLIER (Lyons). Formerly this distinguished surgeon used, in resecting the ankle joint, to concern himself chiefly with a malleoli, and to regard the astragalus as of comparatively second rate importance. He now takes the reverse view. He always removes the astragalus. "The astragalus," he says, "is a bone of little vascularity, which, once attacked, is incapable of recovery."

He has done this form of operation twenty-one times. He removes the astragalus, and thus clears the way for examination of the deep parts, etc. If the malleoli are affected, he removes the disease, but he proceeds economically, and always leaves a part of them. Even when the pus comes from the tibia, he removes the astragalus and scrapes the former bone.

After extirpation of the astragalus, the calcareum mounts into its place between the malleoli. The cavity is soon filled with a plastic, osteo-fibrous mass which permits the restoration of the normal movements, and, although the foot is slightly shortened, its form is preserved perfectly.

Like M. Reverdin, he prefers small forceps with which to seize the astragalus.

The extirpation of the astragalus in good time can do immense benefit, and

permit the preservation of useful feet in cases which must have come to amputation, had the surgeon waited too long without interfering. The operation is not serious. Of the last fifteen cases, of which some were in a deplorable state of general health, Ollier had not lost one.

The operation should be reserved for children, adolescents and young people. —*French Surgical Congress.—Annals of Surgery.*

A Case of Dislocation of the Astragalus.

Dr. P. D. BRYNE (*Iowa State Medical Reporter*). On January 4, 1885, F.R., aged nineteen years, was wrestling with a companion of about his own age; his foot caught in the carpet, his companion either stepped on his angle, or kicked him just beneath the internal maleolus of the right foot.

He supposed that he sprained his ankle. I was called, and saw the case about one-half hour after the accident, and upon examination found a lump on the outer side of the ankle and a hollow on the inner side; the foot was considerably inverted. I diagnosed it dislocation of the astragalus outward, and rupture of the external lateral ligament and of the anterior inferior tibio fibular ligament; also of the intertarsal (calcaneo astragaloid). Allowing the fibula to be rotated and twisted, outward and backward, so that the astragalus glided outward and to the front of it. I sent for assistance to Dr. Bracelin. When he arrived he confirmed my diagnosis. By firm extension and counter-extension, and by pressure on the bone it was replaced; then by grasping the bones of the leg at the lower end tightly, and by pressure with the thumb, it could be retained in position, but at my suggestion Dr. B. let it go, it glided out again, and we

could see that the fibula rotated. We again replaced it, and placed a pad over it, and put on a roller bandage very tightly around the ankle and allowed it to extend up on the leg to about its middle and lower third. I let this bandage remain on for ten days, then removed it; in the meantime there was no swelling, except in the toes and above them on the foot. After removing the roller bandage, I made passive motion of the joint; there was no swelling in the joint.

I then applied a plaster of Paris bandage and let it extend up the leg the same distance as the roller bandage. I left this dressing on for a little over two weeks, I removed it, and again made passive motion of the joint. I then applied another plaster of Paris bandage, as before, with directions to let it remain on as long as it caused no trouble. In the mean time the patient pursued his usual occupation, walking with the aid of a crutch on account of the stiffness of the bandage. It remained on for three weeks. I removed it and again made passive motion of the joint. There was no swelling, pain or stiffness whatever. I applied another plaster Paris bandage, with the same directions as before, *e. z.*, to let it remain as long as it gave no trouble. I did not see him for about two months after this time, when I was called to see another patient in the same house. He presented himself and said that his foot was all right; that he had left the bandage on for three weeks. When he removed it there was some stiffness, and it felt a little weak when he put his weight on it; it also swelled a little when the bandage was removed, but all passed away, and when I saw him last there was no indication that the joint had ever been injured. It was bandaged in all about nine weeks.

A Case of Angioma.

DR. J. E. BLACK, Memphis, Tenn.: The following case came under my treatment through the courtesy of Drs. Mitchell and Maury of this city: The patient, a mulatto boy, age eleven years, was well developed and ordinarily intelligent. There was no history of syphilis or scrofula in his antecedents. The tumor was situated on and entirely covered his nose and a portion of each cheek, extending from a line parallel with the supra-orbital ridge, to half an inch below the end of the nose. It measured four and a half inches in its



long axis and three and a half inches transversely; it was smooth to the touch, pear shaped, and diminished in size by pressure. The mother stated that the tumor was about the size of the end of her little finger at his birth and had grown slowly and steadily ever since. The patient now suffered with frontal headache, some pain in the tumor and in his neck, and great difficulty in vision, owing to the tumor projecting in front of his visual organ. He could not bring both eyes to bear on the same object at the same time, and was compelled to turn his head side ways in order to see any object in front of him.

There are several ways for operating on these vascular tumors ; such as injections of ferri persulph., etc., and the application of the galvanic needles, to cause coagulation ; the application of an acid to cause sloughing ; the knife and the ligature, to produce strangulation. The operation of injecting different solutions has been followed by death by the entrance of a portion of the clot into the circulation. The application of the galvanic needle has never produced death in this way, but the application of the electric current is not always followed by a cure of the tumor.

In this case I determined to try the ligature, and assisted by Drs. S. T. Armstrong and E. Miles Willett, jr., I passed a double silk ligature around and through the tumor in the usual way. In two hours time the tumor had decreased to less than half its usual size, and its temperature had fallen below that of the surrounding surface, showing that the circulation was entirely cut off.

The patient progressed finely until the fourth day, when tetanus supervened, and he died in convulsions twenty-four hours from its development. Below I give an extract from Dr. Armstrong's report of a microscopical examination :

"The tumor, of which it is scarcely necessary for me to give a general description, is composed of a dense connective tissue network, interspersed with small blood vessels. There is no cellular formation nor other evidence of anything but an angioma, with great hyperplasia of connective tissue."

Cod Liver Oil and Lime Water in Scalded Throat.

Dr. H. D. PALMER very truly observes in the *Practitioner*, that so many little children die annually, especially amongst the poor, from drinking from

the spout of a boiling tea kettle, that a simple plan of treatment, which saved the life of a little child under his care a short time back, is worthy of record.

He was sent for to see Alice B., aged three, who when the mother was out of the room had attempted to drink from the spout of a boiling tea kettle, which stood on a low fire-place about level with its face. She had succeeded in taking enough into her mouth to scald the throat most severely, and when he got to the house he found the little patient collapsed, livid in the face, and evidently dying from shock. The mouth was so swollen and scalded he could form no idea as to the extent of the injury to the throat. He thought the child would not recover, but determined, as it could not take food of any sort, to give it equal parts of cod liver oil and lime water, as much for the sake of a dressing to the injured parts as for the nourishment the oil would afford. He ordered it to be fed with a teaspoonful every hour, and from the first the beneficial effects were truly marvellous. The pain was evidently relieved by keeping the scalded surface constantly coated with this novel Carron oil, and as the child at first only swallowed with difficulty, it was longer in contact with the inflamed mucous membrane. In three days the child began to take notice, and in about a week afterwards all the distressing symptoms of difficulty of breathing, which had made him fear for its life at times, had vanished. As it improved, he added milk to its diet, and gradually reduced the oil and lime water. It recovered completely.—*Med. and Surg. Reporter*.

A New Mode of Operation for Fistula in Ano.

The operation for fistula in ano is not unfrequently followed by incontinence

of fæces or flatus, even when skillfully performed after the most approved methods. By considering this fact, Dr. Edward W. Jenks was recently led to devise a process similar to that employed for the repair of torn perinæum, and the chief points of which he indicates as follows in the *Obstetric Gazette*.

First, after determining the routes of the fistulous tracts, they are incised after the usual method, aiming in every instance where the incision involves either sphincter muscle, to have the incision at right angles to the muscular fibres. The next step is to carefully dissect out the so-called pyogenic membrane, or all of the lardaceous tissue and the cartilaginous substance along the route of the fistulæ. This can be done with a curved scissors or a cutting curette. It is not unusual to find several bleeding vessels in the fistulous tract; these should be secured by torsion in preference to ligatures, but if ligatures become a necessity, then Chinese silk is to be preferred. The surgeon frequently finds, after cutting a fistula, that there are, overlapping the incision, portions of thin, livid skin of low vitality. This should be entirely cut away in all instances, but in the operation under consideration the edges of the incised skin should be pared until they can be brought together perfectly, and then, by deep sutures, the incised parts maintained in perfect apposition until adhesion is effected. For this latter purpose silver wire sutures, properly adjusted, are, without question, preferable to silk. If an opening into the rectum of the tract of the fistula is of such a height that its incision includes any portion of the internal sphincter, it is necessary to use additional sutures within the rectum to bring and maintain in apposition such incised parts as the external sutures will fail to do, and for this purpose Chinese silk should

be employed. If it is desirable to use stronger sutures the best material is "ironized silk."

In case of there being several fistulous openings, an attempt to cure all of them by this new operation would probably result in failure, since, with several incisions, left to heal by granulation when the sphincters are included, incontinence is sure to follow. For this reason, too much should not be attempted in one operation. As regards the matter of adjusting sutures, the same exact rules cannot be followed as in other plastic operations about the pelvic organs, owing to the lack of uniformity in the shape and location of fistulæ. Adherence to the general rules of surgery, the teachings of experience, and the ingenuity of the operator are requisite in each individual case. The paper concludes as follows:

1. In my own opinion, while this mode of operating is not adapted to every form and variety of anal fistulæ, I believe it is by far the best method in the majority of cases.

2. The long and tedious convalescence inseparably connected with the ordinary mode of operating is by this mode avoided.

3. Other advantages of this mode of operating are (a) securing union by the first intention, and (b) the prevention of incontinence.

4. In cases where the external sphincter has become rigid, it is not easy to hold its incised ends in close apposition without forcibly dilating it with the thumbs prior to operating, or else by an incision opposite the tract of the fistula, of sufficient depth to temporarily paralyze the muscle. In this way the sutures in the sphincter will render better service.

5. For the purpose of facilitating the introduction of sutures within the rec-

tum, there are two means, as follows: (a) the introduction into the rectum of a Sims speculum; (b) the eversion of the lower portion of the rectum by means of one or more fingers being introduced into the vagina, and then turning a portion of the rectum through the external sphincter.—*Jour. Amer. Med. Ass.*

A Case of Varicose Ulcer.

In presenting this case to you, I wish more especially to call your attention to the points of differential diagnosis, especially between specific and non-specific ulcers. One of the first points to which I will call your attention is the varicose condition of the veins. The patient has been holding his leg up for sometime for your inspection, and the blood has flowed out of the veins, but you will notice as I depress the limb the blood returns and the veins become dilated. This man has an occupation that requires him to stand all the time, being employed in a cotton factory. Patients who are thus employed are specially subject to this form of disease. The standing produces a stasis of blood and a passive congestion of the cutaneous veins ensues, which, being long continued, entails an extraordinary pressure upon the tissues of the skin, and this finally assumes an inflammatory condition that continues for a time, and if neglected the tissues break down in the weakest spot, and we have the cutaneous ulcer. This ulcer is known as the varicose ulcer, and usually occurs in the middle and lower third of the tibial region. The location in this case is unusual. These ulcers are of various size, and sometimes completely encircle the limb. Sometimes they occur on one side of the body, sometimes they are symmetrical.

The next point to which I will call

your attention in differentiating this disease from syphilis, is the fact that this lesion is extremely painful, whereas syphilitic lesions are very rarely accompanied by any subjective symptoms, no matter how extensive they may be. The pain in this lesion is sometimes so great that the patient is not able to stand on the limb. Another point is that it has existed for fourteen years, and the ulceration is superficial, whereas a syphilitic lesion in this space of time would have produced a more extensive destruction of tissue and would have involved the deeper structures of the skin. Besides that, you would find the lesion accompanied by marked induration around its edges. The borders in this case are more or less flattened and show little evidence of induration. The last point in the differential diagnosis is the absence of all specific history.

As regards the treatment of this lesion, in the first place we must produce a change in the character of the surface. It has been neglected until the granulation has piled up and given rise to the condition known as *caro luxurians* or proud flesh. As soon as the epithelial cells develop to a certain point they break down or degenerate. They do not pass on to the formation of healthy epidermal cells. Furthermore, we will have to consider in our treatment the cause of the disease, which consists in the passive congestion. For this purpose we will instruct this man how to apply a bandage to the affected limb from the toes, passing upwards with reverses to the knee, even covering the lesion. The object of the bandage is to produce pressure and give that support to the dilated vessels which the skin was not able to furnish. The bandage is put over the lesion also for the purpose of producing pressure. Upon the ulceration itself we will apply an ointment

which will affect the surface. In this case I think it advisable to use a paste made up as follows: $\mathcal{R}$. Acidi salicylici, gr. xx.; pulv. zinci oxidi, amyli, $\bar{a}\bar{a}$ 3 i.; ugt. petrolati, $\bar{z}$ i. Sig.—Apply twice daily.

Salicylic acid is supposed to produce a change in the character in the character of the cells composing the base of ulceration. It also has disinfectant and healing properties. The patient will furthermore be directed to wash the parts every morning with hot water and castile soap previous to the application of the ointment. This will not cure the case, and as to a prognosis, although you can give to the patient a favorable one, you must never agree to cure an ulcer in any given time. If the patient follows out directions, he will get well; it may take three months, it may take six.—*Atlanta Med. and Surg. Jour.*

Recovery from Malignant Pustule.

Dr. W. E. BUCK records this case (*British Medical Journal*): Mr. F—aged thirty-one, a veterinary surgeon, experienced on October 6th a stinging sensation at the back of the right wrist. A small bleb was formed which he scratched off, and there was some tenderness of the elbow and arm-pit. He had a slight rigor. On October 8th he was seen by Dr. Meadows, who prescribed some salicylate of soda and tincture of aconite, in frequent doses, as his temperature was 104° , and the rigors continued almost the whole of the day. A black eschar began to form on the afternoon of the 8th, and on the 9th it became about the size of a sixpence; its base was red and œdematous, and surrounded by some vesicles in a circular shape. The temperature was nearly 104° ; the patient felt cold, and the tongue was foul. I visited the case with

Dr. Meadows, and we injected pure carbolic acid under the eschar, using an ordinary hypodermic syringe. Unfortunately we could only introduce a small quantity, as it oozed out in the withdrawal of the syringe, and with it a serous looking fluid. I dried some of this fluid on a cover glass, stained it with methyl-violet, and found the well-known bacilli of anthrax. We prescribed large and frequent doses of soda-hyposulphite, and ordered also a large quantity of meat. Under this treatment he rapidly improved. On October 12th we again injected carbolic acid. The temperature came down, and, as the patient said he felt all right, the hyposulphite of soda was reduced to three times a day. The eschar did not finally separate for nearly six weeks, and the ulcer then soon healed. I believe that the main remedy in this case was the injection of pure carbolic acid, a mode of treatment which does not seem very painful. There was a clear history of the disease, which was contracted exactly twelve days before its first appearance, Mr. F— having examined the flesh of an animal that had died from anthrax.—*Med Record.*

The Treatment of Carbuncle.

Dr. JAMES COLLINS says in the *Philadelphia Med. News*: I have lately treated two cases of carbuncle on the back of the neck by a method which seems to have some advantages. The patient is put under the influence of an anæsthetic, and a linear incision made. I then take a scoop and remove all the necrosed tissue, and wash the parts thoroughly with an antiseptic solution of mercuric chloride. I then put in a drainage tube, and insert two stitches to bring the central part together. Each day the cavity is thoroughly washed out with the antiseptic solution. The

patients have done well, and the cicatrix has been less than after any other method I have tried. The success depends upon the removal of the necrosed tissue and the use of the antiseptic solution.

Capsicum in Hæmorrhoids.

A case is mentioned by a correspondent of a Peruvian medical journal of a case of bleeding piles cured by capsicum. The patient was a man of 28 years of age. He was much distressed by passing variable quantities of blood after going to stool, and suffered a good deal from anal irritation and tenesmus. No tumor could be detected. He had formerly been in the constant and daily habit of using a violent purgative for ten months, and after he left it off, obstinate constipation followed, and it was under these circumstances that the hemorrhage commenced. The writer tried all kinds of remedies and regulated the diet without producing any great improvement, and at last was contemplating surgical measures when he happened to mention the case to a hospital physician, who suggested a trial of capsicum, as he had himself been cured of a very obstinate form of chronic dysentery by its means, and he felt sure that it possessed the property of acting on the rectum. This was consequently prescribed with meals and the doses gradually increased. A marked improvement soon was observed, and at the end of a couple of months a complete cure was effected.—*London Medical Times*.

For Painful Hæmorrhoids.

DR. U. I. NILSE in the *New England Medical Monthly* says: This ointment has been a favorite of mine for several years, and I send it to the Clinic for the use of your readers:

R. Extract of hyosciamus, pulv. saffron, aa, 3 ijss; plumbi acetas, 3 j.; glycerole of starch, 3 j. M.

Graduated Suspension as used in the Treatment of Spinal Disease.

DR. C. L. SQUIRE, in *Medical Annals*:—In a recent paper on this subject, I have stated my views on the plaster jacket treatment. I have employed it in my practice, and, like many other men. I have had varied experience. In all of my cases I have been able to continue the treatment to the end. Therefore, I feel justified in drawing the following conclusions as the result of my clinical observations:

First. Old cases of angular curvature—and by these I mean patients that have recently recovered with a deformity which has made no impression on the general health—should be dissuaded from employing the treatment for overcoming the deformity, as experience has shown that it is not often attended with the desired result.

The same may be said of ancient cases of rotary lateral curvature, unless the patients are children.

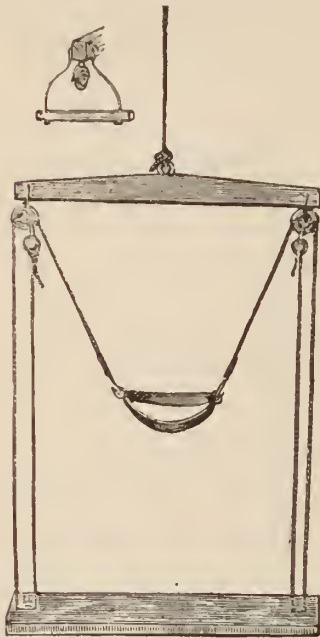
Second. The treatment may be practiced in all cases of progressing disease and at any stage. A cure may be expected in Pott's disease in from six to sixteen months.

Recovery in rotary lateral curvature cannot be looked for much under three years. In either of the cases a jacket should be removed and a new one applied as often as every nine weeks.

Third. The plan for suspension should be vertical and one that will admit of graduating the amount of extending force to the toleration of the patient. I have found that my patients can endure a force equal to one-third of their weight, and scarcely more than this, without its producing the unpleasant

symptoms of excitement, fainting, vomiting and cramps, the occurrence of which has too often curtailed the time desired for applying a jacket.

In order to carry out this principle, I use an apparatus which consists of a horizontal bar supported at its centre from the ceiling. At the extremities of this bar are loops or attachments for the hands of the patient; and pulleys for the cords which support the seat. In the seat at each end is a pulley, also for the cords to play over. These cords, two in number, are attached by one



end to the horizontal bar, and, after including the system of pulleys, are fastened by the other end to the usual head gear, as may be better understood by referring to the accompanying illustration.

In the use of this swing, the patient must be able to reach the handles with his hands while his arms are at right angles with his body. The head gear must be adjusted about the chin and occiput; then by lifting himself clear

from the floor by his hold on the handles he can seat himself in the swing; removing his grasp now from the handles, one-third of the weight comes upon the chin and occiput, while the remaining two-thirds, which practically is found to have been a dead weight, is supported by the seat of the swing. I may add that by this process the spine will be simply straightened and not stretched. Measurements taken before and after treatment by this mode of extension and the application of the plaster jacket have shown an increase in height for the patient of one inch in a recent case. Every time a jacket is applied it is attended with a little increase in height over the former measurement, while the extending force is every time the same, but a far greater advantage is obtained in the length of time the patient can remain suspended, which may be, as some have expressed it, for an hour at a time.

The main idea which I have desired to present in what I have said is this: It is not necessary nor best to use the whole weight of the body to extend the diseased vertebral column. About one-third of the weight of the body is sufficient extending force for all surgical purposes. The apparatus which I have here briefly described accomplishes this result, and relieves the patient from all the inconveniences and hardships of the ordinary methods of suspension.

The Radical Cure of Cancer of the Rectum.

MAURICE POLOSSON, in an article on this subject in *La Lyon Médicale*, proposes to operate for the radical cure of cancer of the rectum by first performing colotomy, and then making a secondary operation for extirpating the cancer. The preliminary operation renders the extirpation of the neoplasm more easy, and less subject to subsequent complica-

tions. Polosson has tested this method in one case, making the artificial anus in the iliac region. This case recovered. —*Revue des Sciences Méd.*

The Balsam of Fir as a Dressing for Lacerated Wounds

DR. A. LIVEZY gives the following directions in the *Medical Summary*:

Take a teaspoonful of the same, spread it on linen and wrap it around the lacerated part; nature will do the rest.

The torn edges must be placed in apposition, and the wound washed in water (warm) and impregnated with a tablespoonful of listerine, or some other antiseptic wash. say, Oj. to 3 iv. of listerine. He thinks that this dressing is worthy of a trial. —*Medical and Surgical Reporter.*

A New method of Administering Ether.

DR. A. F. MULLER (*Medical News*) reports excellent results for securing a steady flow of ether vapor to the patient:

He has an apparatus consisting of two halves of a rubber foot-ball, sewed together at the edges, and connected by a tube with a bottle containing ether, which is plunged in a vessel of hot water. As ether boils at 98 degrees, the vapor passes steadily and rapidly, and is inhaled by the patient, whose face is covered by the inhaler, protected by a clean towel. There is no nausea, no struggling, no stage of excitement. The quantity of ether varied from an ounce and a half to three ounces.

VENEREAL DISEASES.

On the Surgical Treatment of Infants.

DR. DE FOREST WILLARD, writes in *Jour. Amer. Med. Asso.* as follows:

The genito-urinary organs may also require attention immediately after

birth. A simple occluded urethra is easily relieved by the careful introduction of a sound or catheter. *Epi- and hypo-spadias* and *exstrophy* of the bladder should not be allowed to go on to adult life without relief. As soon as the child has passed its dentition period a plastic operation should be attempted for relief, since the mental and moral effect of such a deformity has often a marked influence upon the lives of the unfortunates. *Adhesion* of the *vulva nymphæ* should not be overlooked, since not only does the nervous system suffer, but the parts may be improperly developed. Separation can always be accomplished by the finger or by a probe. An absolutely *imperforate hymen* should never be allowed to remain, if discovered, since, at a later period, if permitted to impede the menstrual flow, serious and even fatal results may follow its division after the uterus and Fallopian tubes have become dilated by the imprisoned secretion. *Imperforate vagina* should receive at least careful diagnostic attention to detect the presence of a uterus, and, if not absent, fuller development will be secured if the passage can be opened during the first few years of life. With a catheter in the urethra and a finger in the rectum, a careful operator can explore safely. I have met with several cases in which the penis was preternaturally *short* and ill-formed, the body of the organ during flaccidity being almost entirely concealed in the fatty tissues of the pubis. In such instances I have removed the prepuce during the first three months of life and have cut away all restricting bands of skin and connective tissue, sometimes even drawing beneath the penis an extra flap of skin when the corpus spongiosum has been short and dwarfed. By such means the fullest amount of growth is encouraged.

Adherent and contracted prepuce or *phimosis* has been the subject of much discussion in regard to the causal influence upon certain nervous manifestations. My views upon this subject have already been published, and after two years of additional experience, during which time I have been brought daily in contact with this class of cases, I can reiterate what was then stated,—namely, that while more or less adhesion is an almost constant and normal condition, yet that when urinary, choreiac, parietic, or any other nervous symptoms develop, a careful investigation should never be omitted, since a direct relation will in a certain number of cases be clearly evidenced, and removal of the cause will speedily cure the manifestation. The fact that even circumcision does not relieve the symptoms, is undoubtedly true in many instances, and I have never claimed that preputial adhesion and narrowing was anything more than one of several factors which should be carefully scrutinized. I have only urged that its influence should not be overlooked; and when so simple an operation as stripping the prepuce from the glands by the thumbs or possibly by the use of a probe is all sufficient, there can certainly be no argument against removing this one factor. My opinion in regard to the feasibility of drawing back the prepuce in young children, even when the opening seems scarcely pin-hole in diameter, has been greatly strengthened, and circumcision is only necessary when the simpler method described fails to secure a prepuce freely movable over a normal glans. Dilatation even is but rarely required, a few moments of continuous pressure soon revealing the mucous layer, adherent perhaps just about the meatus, which, when loosened, permits the head to pass through the opening, and the corona is

freed with the thumbs. Should temporary paraphimosis occur, two probes or a hair-pin slipped beneath the constriction will easily permit replacement.

The Treatment of Patients Affected With Disease of the Prostate.

The American Journal of the Medical Sciences thus reports on a communication to the *Annales des Maladies des Organes Genito-Urinaires*:

Dr. Guyon, holding that the normal physiological condition of those affected with prostatic disease is congestion, formulates the following treatment for the affection:

1. The avoidance of all causes of general or local chill.

2. The proscription of over-eating and alcoholic excess, and in general avoidance of abuse, rather than the simple use of salads, meats, fish, shell fish, white wines and champagne.

Not only should excess of irritating or alcoholic drinks be avoided, but also that of beverages in themselves inoffensive. For this reason the treatment of the affection by mineral waters should be advised with extreme caution.

3. Voluntary and prolonged retention of the urine should be avoided, as being conducive, in those affected with protastic disease, to the production of retention, cystitis, etc.

4. Moderate indulgencies in sexual intercourse.

5. Consideration of the unfavorable influence exerted by prolonged horizontal decubitus and immobilization.

Prolonged rest in bed should be avoided, and before retiring, the patient, if possible, should, if unable to walk in the open air, promenade in his room for fifteen or twenty minutes, and in the morning such exercise should be repeated.

During the day sedentary habits

should not be contracted, but at the same time fatigue should be avoided.

Constipation should be obviated, if existing, without the use of drastic cathartics. A large enema, warm or cold, in the morning exercises at the same time an evacuating and a soothing effect. Emollient enemata, before retiring, frequently also yield good results.

6. The function of the skin should be excited by dry friction and massage.

Baths should not be continued beyond fifteen minutes.

Dr. Guyon next considers the medicinal treatment of the affection, and suggests—

1. As a remedy for the sclerosis of the urinary apparatus, the use of potassium iodide in quantity varying from eight to fifteen grains daily, during fifteen days or three weeks of every month, and continued for months or years.

2. For the congestive lesion, the careful administration of ergot, nux vomica, and all preparations containing strychnia as a base, is advised.

3. As remedies for vesical irritation, belladonna, hyocyamus, and the preparations of valerian will be found more offensive than opium and its derivatives, but nevertheless sufficiently active.

The bromides are considered to have in vesical disease only an insignificant effect, but in some cases this should be utilized.

The foregoing hygienic and medicinal treatment, Dr. Guyon considers, will, in most instances, suffice to overcome the functional disturbances experienced by prostatics, and only when it fails should the use of the catheter be resorted to.—
Weekly Med. Review.

When Does Syphilis Become Constitutional ?

Discussing this interesting question in the *Nordist Medicinskt Arkiv*, Dr. PONTOPPIDIAN states his belief that the first manifestation of syphilis (the chancre), in its early stage, is a local disease, but that the syphilitic virus will infiltrate the adjacent tissues and glands in a short time afterward. This period he places at two or three weeks. He claims that constitutional infiltration does not take place during the first stage or period of latency of the syphilitic virus. In support of his views he reports five cases, out of a large number experimented upon at the Copenhagen Hospital, in which auto-inoculations were made. The following case will serve as an example, as they are all similar: L. A. was placed in the hospital August 12, with a small foul ulcer in the sulcus coronarius, and reported infected sixteen days prior. The second day the ulcer was cleaner but somewhat increased in size, with hard infiltration. Inoculation was then performed in three places upon the abdomen of the patient, which the fourth day was noticed as without effect. The sixth day the places of inoculation were hardly perceptible. The fifteenth day adenitis inguinalis was in existence. On the seventeenth day at the place of one of the inoculations a little red, not elevated, spot was seen. The nineteenth day induration was noticed; the red spot increased in size and was slightly elevated; no constitutional symptoms. On the twenty-fifth day the papule was about the size of a pea, elevated and hard; syphilis had then appeared. Syphilitic maculæ were seen on the tonsils, and slight enlargement of the glands about the neck. Constitutional treatment was resorted to. The fortieth day the local lesion,

both on penis and places of inoculation, had disappeared. Here, what appeared to be a negative result at first, developed, after a certain period of incubation, the characteristic signs of syphilis. If this second inoculation be performed before the initial sclerosis or chancre has had time to entirely poison the organism, the result remains negative at first, but the period of incubation being completed, a new sclerosis is developed. The writer quotes Wallace, Puche, Boeck, and others as having reported cases where secondary inoculation had given rise to one or more fully developed lesions, where the virus was taken from a chancre and inoculated upon the affected individual. From his observations he believes that the chancre thus obtained will disappear before full development, if the inoculation be not performed in the early part of the secondary stage, from the fact that the infiltration from the first lesion has become universal.—*Medical Record*.

DISEASES OF THE SKIN.

Recovery from Lepra Tuberosa.

At the recent meeting of the Medical Congress, at Wiesbaden, P. G. UNNA, of Hamburg, reported the case of a woman, 38 years of age, a native of Germany, who had lived fifteen years in Brazil, and had acquired a case of leprosy in an unknown manner. It was a pure case of lepra tuberosa, without anæsthesia, extending over the face, arms, legs, and a portion of the trunk. She was under treatment in Unna's clinic for four months, at the end of that time she was cured. She was treated with pyrogallol, resorcin, chrysarobin, and sulph-ichthyolate (?) of ammonia. A concentrated ointment (10 per cent.) of chrysarobin and resorcin acted very well against

the nodules, the ichthyol only feebly, while the pyrogallol caused the formation of vesicles. During the last three weeks of her stay in the clinic the treatment was mainly directed towards removing the pigmentation and the cutaneous deformity, which was done by a plaster of mercury, carbolic, and salicylic acids.—*Gazzetta degli Ospitali*.

Two Cases of Herpes with Motor Paralysis.

DR. G. WALLER communicates to the *Weekblad*, of Amsterdam, notes of two cases of herpes, in which motor nerves were affected. A widow woman, aged 68, had a painful patch of herpes, covering the whole of the right side of the face, stopping abruptly at the middle line. After some weeks, the herpetic spots and the pain disappeared, being, however, replaced by paralysis of the same side of the face, with loss of taste on the right half of the tongue. The other case was that of an old man, who had a herpetic eruption situated on the anterior aspect of the upper arm on the right side; this was accompanied with a severe itching and a pricking sensation. Eight days after the eruption, he found himself unable to raise or extend the arm. There was no pain or swelling in the muscles or joints, and the electrical reactions were normal. The herpes and the paralysis both indicated the circumflex and musculo-cutaneous as being the nerves affected. The treatment was electrical, and brought the case to a successful termination.—*Brit. Med. Jour.*

Lotion for Dandruff.

R. Tr. capsic., 2 parts, glyc., 8 parts, cologne 2 parts, aq., 25 parts. M.

Sig.—Apply by means of a sponge to the scalp every day.—*Med. World*.

THE AMERICAN MEDICAL DIGEST.

PART III.

Diseases of Women and Children,
and Obstetrics.

DISEASES OF WOMEN AND CHILDREN; AND OBSTETRICS.

DISEASES OF WOMEN.

Anteflexion of the Uterus and its Associated Pathological Conditions; their Prevention and Treatment.

Dr. W. GILL WYLIE read a paper (published in *N. Y. Med. Jour.*) with this title, which was the continuation of a paper contributed by him to the *American Journal of Obstetrics*. After a brief summary of that paper he proceeded to the consideration of the prevention of anteflexion. This depended upon its ætiology, chiefly reducible to defective general health during childhood, leading to insufficient and imperfect development of the genital organs. To counteract this tendency of puny children, they should have good food, fresh air, and opportunity for exercise, and their moral and mental surroundings should also be made wholesome. It was surprising how much could be done for delicate children by attention to hygienic details. Corsets, especially those which extended below the waist, certainly tended to displace the uterus, and might increase anteflexion. If it was begun at an early age lacing was capable of doing great harm, of a character so insidious that it was not noticed at the time. Local treatment was hardly applicable as a preventive, for the condition was generally ascertained only when its effects began to show themselves.

It was usually on account of painful or irregular menstruation, or sterility,

that curative treatment was sought for. If the menstrual derangement resisted general treatment he usually began local treatment by inserting a small piece of borated cotton saturated with glycerin against the anterior lip of the cervix, crowding it backward somewhat in the vagina. This tended to form a ball which would press the cervix backward and lift the body of the uterus. The patient was to remove the cotton at the end of twenty-four hours, by means of a string attached to it. The glycerin softened the tissues, by reason of the profuse watery discharge it caused, thus improving the pelvic circulation, and it tended to relieve over-sensitiveness. The application was to be repeated two or three times a week, until a vaginal examination could be made without giving pain, and the hot-water douche was to be used in the intervals. If there was any congestion or subacute inflammation in the tissues about the uterus, instead of using simple glycerin, the cotton was saturated with a mixture one part of alum, fifteen parts of glycerin, and enough carbolic acid to act as a disinfectant, generally about an ounce to the pint; and the wads were generally increased in size. In two or three weeks it would be found that the vagina was larger and less sensitive; the cervix softer and less conical, and directed more backward; and the parametric tissues less sensitive and not so rigid as before. These results might require a longer time to bring about, especially where the disease had been of long

duration. When they had been accomplished, the next step was to dilate the cervical canal with Sims's dilator, having previously sponged out the vagina with a 1-to-3,000 solution of bichloride of mercury. The instrument, if of the proper curve, could be introduced almost as easily as a sound. The blades should be spread to the width of about two lines. This sometimes would require considerable force in cases of long standing, and in some instances it caused intense pain, like that of menstruation. After withdrawing the dilator, the surgeon should pass a cervical protector up to the os internum, and through it pure carbolic acid should be thoroughly applied to the os internum by means of an applicator armed with cotton. As the speculum was removed, about twenty grains of powdered iodoform was to be blown against the cervix, and this would often relieve the pain at once. He had never seen this procedure do any harm after the proper preliminary treatment and the use of antiseptic precautions. It was generally best not to repeat the dilatation in less than a week, and two or three dilatations would usually be sufficient. It might be well to do the first one at the patient's home, so that she might rest in bed after it. The degree of dilatation should be increased each time, until the blades were separated to the extent of four lines. The dysmenorrhœa would then be found to be relieved, and in favorable cases the beginning of a permanent cure made. As to this, much would depend on the state of the general health.

Sometimes this treatment failed to cure sterility, although it might have put a stop to the dysmenorrhœa. It was then necessary to perform Sims's operation with his metrotome, which Dr. Wylie had had made with blades so curved that they were easy of introduction.

The blade was directed backward, and the posterior wall of the cervix was incised up to the os internum, and cut completely through for the lower half-inch or more, according to the amount of projection of the cervix into the vagina. He did not find it necessary to make an anterior incision, but trusted to dilatation to overcome all constriction at the os internum. For the plug, to be used afterward, he preferred one made of hard rubber. Even after making an anterior incision, according to his experience, the use of a dilator was necessary before a full-sized plug could be passed into the corporeal cavity, and unless it could be so passed, and unless it would stay there of itself when once inserted, the inference was that the end of the plug did not really extend beyond the os internum. To this failure no doubt many cases of want of success were to be attributed.

The author then described the details he employed, as to cleanliness, disinfection, etc., in the after-treatment, and added that the risk from this operation was very small, if due precaution was observed as to the proper preliminary treatment, and if care was taken not to divide the cervix too freely, and it was a very successful procedure. If the dilatation was only imperfectly done, of course the relief would be only temporary, but if it was done thoroughly, and repeated if necessary, a permanent cure would often result. Child-bearing, however, was the best means of overcoming the deformity, and, that being the case, early marriage was to be recommended for women so affected, as sterility was not so likely to be caused early as subsequently. Sponge-tents were more dangerous and less effective than mechanical dilatation, and graduated sounds, especially if they were nearly straight, were not to be recommended.

The author was unable to see the advantage of bilateral division of the cervix. He was also, in general, averse to the use of pessaries for ante flexion, especially stem-pessaries.

The paper closed with the following conclusions: 1. In a certain number of cases of marked anterior curvature no painful symptoms are produced. 2. Anterior displacements are the result rather than the cause of uterine disease, but they may intensify such disease. 3. The dysmenorrhœa is rarely due directly to the flexion, but the latter may aggravate the real causes. 4. Mechanical supports are only palliative, unless the cervix is dilated and complications are treated at the same time. 5. In most cases, imperfect development of the uterus is the fundamental lesion. 6. The general health, therefore, should be improved, and stenosis should be overcome.

Stenosis not the Factor Causing Pain in Dysmenorrhœa.

In the section of Obstetric Medicine of the British Medical Association, Dr. J. E. BURTON gave an account of a certain number of observations made with a view of testing the accuracy of a widely fostered opinion that dysmenorrhœa is frequently the result of closure of some part of the cervical canal. Before beginning his observations he felt ready to adopt the widespread opinion that the dysmenorrhœa was the result of stenosis. He consequently utilized his position as surgeon to the Hospital for Women in Liverpool to determine the question. We are told that for several months he directed all patients so affected to afford him an examination during the paroxysms. We are somewhat astonished at the small number of observations associated with such a field of labor. The whole number examined

and forming the basis of observation amounted to only six, but he says that the condition met with was so uniform and so marked that he does not hesitate to put forth the observation against any theories whatsoever.

"From various causes, he says, observation was difficult; some could not or would not let me know in time, and some had already had bougies passed before I could examine them. In all those I did examine, however, the condition was uniform. The spasm so often met with a day or two before the flow, and which renders the passage of the sound at this period difficult, or almost impossible, had entirely disappeared. So far from there being constriction or spasm at the external or internal os, there was actual dilation at these parts, and the canal was actually more patent from one end to the other than at any other period of the month. It is really easier to pass the sound at this time, notwithstanding pre-existent flexion and spasm, than at any other period. Even in those cases of limp ante flexion so carefully and well described by Dr. Hewitt, the menstrual congestion affects the uterine structures, and the uterus is no longer flabby and doubled up; but it straightens and stiffens itself out by virtue of congestion, and the canal becomes almost straight. The first case examined was one of this kind, and the sound was ordinarily very difficult to pass, the canal being much bent on itself; and when, on attempting to pass it during the height of the pain, I found it pass readily, I concluded that the condition must be exceptional. Subsequent examinations, however, convinced me that, so far from being exceptional, the change was one that took place in all cases. I need not trouble you with histories of all the cases; the history of one was the history of all, and I had to be-

come convinced against my will that obstructive dysmenorrhœa or spasmodic dysmenorrhœa of the kind now under discussion, in reality does not exist. Of course, membranous dysmenorrhœa is not included in these remarks."

By way of treatment he spoke highly of the tincture of iodine applied to the region of the sacrum.—*Weekly Med. Review*.

[We are always on the lookout for clinical observations regarding unsettled questions in pathology; facts are welcome when there are opposed theories. When facts given by different observers do not agree, we are still left to our own judgment.

The above observations by Dr. J. E. Burton lose much in value when we place them beside the record of two or three hundred cases of dysmenorrhœa cured by removing the uterine obstruction.]

A. J. C. S.

Cellulitis.

Dr. JAMES B. HUNTER, in a clinical lecture published in *Med. Times*, speaks of a case of cellulitis as follows: This patient is 38 years old, has been married sixteen years, and has had four children and one miscarriage. The miscarriage occurred eight years ago, and the last child was born six years ago. She menstruates regularly. She suffers from pain in the back on the slightest exertion, especially after stooping or leaning forward. The pain is a "bearing-down" one, as she calls it.

We have seen this patient before, and made a diagnosis of cellulitis, and determined that it is one of those cases in which not much can be done except to make occasional applications of iodine, and to avoid such exercise as causes pain, as stooping or lifting. Under these directions the patient finds herself in a much less sensitive state than when

she was here on a previous occasion. If she could take care of herself she could be improved very much under a little careful treatment, and she could be damaged very much with a little careless treatment. There is some falling of the uterus. We will paint the strong tincture of iodine around the cervix, and thus tend to hasten absorption. It is a great point in these cases to know when not to do anything. Such a condition as is present here always contraindicates an operation for laceration of the cervix, but not necessarily for laceration of the perineum. If this patient could be in a hospital for a few weeks, it would be well to apply iodine to and around the cervix, and then pack the vagina with cotton and glycerin. This would give an elastic support to the uterus, and save her some of the pain which she feels on standing, when there is a tendency for the uterus to prolapse. A little of the iodide of potassium, five grains two or three times a day, is of benefit in some of these cases. Some cases get along very well without any treatment, and others with all the treatment which is proper linger a long time without much improvement. The one thing most needful of all is rest, and for women of this class it is very seldom of any use to order it, as they cannot escape their household work. It is practicable, however, to give some attention to their general health, to regulate their bowels, to advise warm clothing and the protection of the abdominal organs by a flannel bandage constantly worn. The disease is especially prone to recur after any exposure or imprudence.

A New Method of Treating Areolar Hyperplasia of the Uterus

In its first stage is presented by Dr. PAUL SALE, of Aberdeen, Miss. (*Miss.*

Val. Med. Monthly.) He claims that in his hands it has materially hastened cures, besides possessing the advantage of being entirely unattended with such unpleasant sequelæ as the occurrence of pelvic cellulitis, uterine colic, and the like, which supervene occasionally on the use of the mildest local applications. Bearing in mind that the uterus is in quite a degree an erectile organ, and that "Areolar Hyperplasia" is preceded and accompanied by passive hyperæmia, and reasoning from analogy of the treatment of like tissues in the same pathological condition, it occurred to him that systematic elastic compression fulfilled the indications for local treatment better than any other. The time selected for its use is four days after menstruation and the technique of the procedure is as follows: The patient having been placed in the "lithotomy position," and if required, the proper axis of the uterus restored; a Hough's bivalve, or Nott's trivalve speculum, is introduced and expanded. The cervix uteri is seized and drawn down with a double tenaculum, which is handed to an assistant. A piece of thin elastic webbing, from an inch to an inch and a half in width, is cut from two to three and a half inches in length, the dimensions varying with the size of the cervix; the cut ends of the elastic are pinned together, the points of the pins to be afterward snipped off. The cervix uteri is then wiped clean and dry with absorbent cotton, and brushed over with a saturated solution of alum to prevent the bands slipping; the now elastic ring is put over the tenaculum, and is expanded by Carroll's knot tier (or any other like expanding instrument) and then placed over the cervix as high up as possible. The tenaculum should now be freed from the uterus, which should be allowed to go back to its original po-

sition. After watching it for a short time to see if the band should be modified in length in order to get the proper degree of compression, the patient is placed in the semiprone position of Sims', and the vagina well tamponed, especially at its vault, with oakum, which has previously been saturated with pure glycerine. It is preferable for the patient to keep her bed for twenty-four hours, at the expiration of which time the tampon can be removed. The cervix uteri will then be found to have been materially decreased in size, and the band is usually quite loose if it has not been pulled off in removing the oakum. If an eroded os exists, this is now the time to make applications to it, after which the patient is directed to use copious vaginal injections of hot water (six times in the next forty-eight hours); this is to supplement the effect of compression. The compression is at first done twice a week, the interval afterward lengthened according to improvement of patient, to once in seven, ten or fourteen days. A case of average severity is usually cured in from six to eight weeks. The operation has to be changed in some of its details to suit the peculiarities of cases; e. g., it is not advisable to draw down the uterus in one in whom a broad ligament has been shortened by a previously existing cellulitis; nor if tenderness or hardness can be discovered, around or near the utero-vaginal junction, and especially if there is impairment of uterine mobility; under these circumstances, the uterus is steadied by making supra-pubic pressure, the band is then put in position by an expander with four blades. Again, in cervices so conoidal in shape that the band slips off; this difficulty is overcome by introducing into the uterine canal a short glass stem pessary before putting on the band, or a small tupelo,

laminaria or sponge tent ; by using these last, both concentric and eccentric pressure is obtained. This method should be used more cautiously, requiring the patient to remain in bed for twenty four hours, though pessary or tent should not be allowed to remain intra-uterine more than six hours. When he commenced this method its use was restricted to those cases in which the cervix alone was involved, but latterly he found it to act almost as well when the disease has invaded the corpus, cervical compression seeming to exert a beneficial influence over nutrition of the whole organ. In addition to the compression Dr. Sale uses intra-uterine pencils of ergotin and iodoform, and other therapeutic applications.

Fatal Pelvic Hemorrhage Following the Use of the Aspirator Needle.

Dr. A. REEVES JACKSON (*The Chicago Med. Jour. and Examiner*): It is generally thought that the puncture made by the aspirating needle, whether for diagnostic or therapeutic purposes, is free from danger ; and it is employed by most surgeons, without hesitation, both to determine the nature of doubtful swellings and to evacuate deep-seated abscesses, cystic collections, etc. The instrument has even been thrust into an aneurismal sac containing fluid blood without untoward consequences. It is true that death has followed its use in some cases in which it was employed to remove the fluid from ovarian cystomata, and these are the only ones, so far as I am aware, in which a fatal result has been attributed to it.

The following case shows, however, that the instrument is not so entirely safe as is usually supposed, and that even a fatal hemorrhage may follow its employment.

On August 16 I was called to see Mrs.

L. E., in consultation, and received the following history : She was about 25 years of age, and had one living child three years old. During the summer of 1883 she had a premature labor, followed by septic fever, from which she perfectly recovered.

In the afternoon of August 8, after suppression of menstruation for three months, she was attacked with severe flooding, fainting, and labor-like pains. Dr. H., the medical attendant, was summoned, and found the os uteri dilated to the size of a quarter of a dollar. Later, in the evening, the hemorrhage and pains continuing, the vagina was tamponed. At midnight the tampon was removed, and the fetus escaped, leaving the placenta partially protruding from the os uteri. A portion of it was removed by traction, and as much as possible of the remainder was scraped away by means of a dull wire curette. August 10 the patient had a severe chill, followed by headache, fever, and uterine pain. The curette was again used, with the result of bringing away a few shreddy pieces, and the uterus was then injected with Churchill's solution of iodine. From that time onward there was a daily chill, with strongly-marked febrile symptoms, and continuous pelvic pain and tenderness.

On examination I found general pelvic fullness with heat and great tenderness, especially in the right broad ligament. The uterus was bulky and slightly movable ; the os sufficiently open to admit the end of the fingers. Issuing from the latter was an offensive, thin, bloody discharge. She was given morphine, potassic bromide, quinia, etc., and had intra-uterine injections of carbolized water. After two or three days the discharge lost its offensive character, but the inflammatory and febrile manifestations continued.

At this time, a brother of the patient, an accomplished physician, arrived and took personal charge of her, so that every detail of treatment was assiduously enforced.

On the evening of the 22d I detected a soft spot in the right ligament, about one inch from the uterus. It was decided to introduce the aspirator needle at the place with the hope of finding pus. This was accordingly done under antiseptic precautions. There came into the receiving bottle about a dram and a half of serum, tinged with a little blood. Not feeling satisfied I withdrew the needle and re-introduced it, directing its point rather more toward the uterus, with the result of bringing away two or three drams of pure blood. The needle was then withdrawn, and the vagina syringed with hot carbolized water.

In a few moments the nurse informed me that there was bleeding from the vagina, and on returning to the patient, I found that there had indeed been a loss of two or three ounces of blood. I at once proceeded to tampon the vagina, and the hemorrhage appeared to be checked. As the patient was being lifted to a proper position in bed, after the operation, I observed a peculiar ashy hue overspreading her face, which I attributed to a partial fainting from the raising of her head.

Having an important engagement in the country, and barely time to catch the train, I was obliged, very reluctantly, to leave the patient at this critical juncture, in charge of her brother.

The latter informed me by letter, subsequently, that the blood, bright and arterial in character, to the extent of *two quarts*, continued to flow notwithstanding the presence of the tampon, which he tried to make firm, and that death ensued in less than an hour after the operation.

Remarks on the Relation of Impotence to Sterility in the Woman.

Dr. L. S. OPPENHEIMER, M. D. Impotence is here confined to an inability to completely perform the sexual act. If this condition is congenital, we usually find the erectile tissues lax, flabby, and lacking blood. There is no sexual excitement, the sensations of coitus are more annoying than pleasurable, while the sexual orgasm of the uterus and the impression of a climax of voluptuousness normally accompanying the act are entirely absent.

It is sometimes, though not often, possible for one of these conditions to be present and pregnancy to supervene; but when all co-exist, even though the menses and generative apparatus appear normal, fecundation will probably not take place.

The sexual orgasm of the uterus referred to normally occurs at the height of sexual excitement, and consists of a number of rapid contractions and relaxations of the cervix, a clonic spasm in which the os opens and closes with a sort of suction movement, which lasts only for a few seconds, when all is again quiet. It is believed that this act of suction is a mechanico-physiological function, and results in drawing the seminal fluid into the uterine cavity.

The opposite extreme from utter impotence is equally effective in giving rise to barrenness. Courty says that excessive sexual excitement, an orgasm passing all limits, as is the case with some hysterics, can give rise to a veritable spasmodic or convulsive habit in the sexual organs, more particularly in the utero-ovarian apparatus, and thereby result in sterility. Barrenness in this instance probably depends upon the continuous activity of the uterine walls and the consequent inability of this organ to retain the male germ.

Many of the causes of sterility in the woman are very obscure. It is, therefore, not at all strange that congenital impotency, which is comparatively rare, should be usually overlooked or undervalued. Statistics, as a natural sequence, are almost entirely wanting in this field, notwithstanding the labors of Beigel, Rouband, and a few others in this direction.

This brief article intends merely to call attention to this as an important factor in the production of some cases of sterility, because very few of the writers on gynecology make any reference whatever to it. The diagnosis is usually made without any difficulty. A thorough investigation should invariably be demanded if the patient is to be treated rationally.

It is my intention here more especially to deal with the treatment of those cases in which no decided signs of disease exist, that is, purely functional impotence. In these cases much benefit may be expected from the use of good tonics, hot vaginal injections, aperients, moderate exercise, and electrization. So-called aphrodisiacal medicines will be found far inferior to these. It may appropriately be added here that the much vaunted damiana has never had the slightest influence upon the cases in which the writer used it.

Faradization has given most gratifying results. It is of especial value where the menstrual flow is scanty, irregular, or entirely absent; if it be excessive, galvanization is preferable. The electricity is applied by means of an intra-uterine electrode, the sponge electrode being passed over the sacral, lumbar, iliac, and supra-pubic regions. Faradization of the vaginal walls is often beneficial. The sittings should take place two to three times a week, and last from fifteen to thirty minutes each.

The physician should in no case of sterility ever make a definite promise of a cure. Nor is it always safe to promise a cure of simple functional impotence. It may, however, be safely said that three months' treatment of the latter is a sufficiently long time to decide the virtues of any single method of treatment. Much, of course, depends upon the size and condition of the utero-ovarian apparatus. The following case report is appended because it presents a typical illustration of the results of faradization alone:

Mrs. T., aged thirty-two, had been married four years, menses normal, health good. Lacked totally the sexual appetite, and intercourse was annoying. Had never been pregnant, but greatly desired offspring. Genital organs apparently normal except the uterus, which had a short, conical neck. Intra-uterine faradization was begun and continued for six weeks. The following menstrual period was passed without any show of blood. The lady confessed that the sexual appetite had suddenly appeared, and she had at once conceived. She was delivered at full term of a healthy male child weighing twelve and a half pounds. One and a half years later, failing to become pregnant a second time, the sexual desire having been entirely absent since the birth of the first child, she again applied for treatment. Faradization was again resorted to and continued for five weeks, when the sexual passion again returned. In about six weeks thereafter she conceived a second time, and was delivered a few months since of her second child.

Morbid Changes in the Ovaries in Certain Diseases.

Dr. S. KOLAGO (*St. Petersburg Inaugural Dissertation*) has carefully examined the state of the ovaries in

syphilis (one case), typhus (two), laryngeal diphtheria (four), acute miliary tuberculosis (one), and in acute poisoning by morphine (one case). He found the following changes :

1. In syphilis: endarteritis obliterans of the ovarian arteries, the same process as that described by Heubner for the brain vessels. 2. In typhus : granular degeneration of the parenchyma of the ovary, hypermia of the interstitial tissue, opaque swelling of the endothelium of the vessels. 3. In diphtheria: hyperemia of tissues, granular degeneration of the ovum and membrana granulosa. 4. In acute morphine poisoning; fatty degeneration of the ovarian parenchyma and elements of the theca folliculi, intense hyperemia of tissues with numerous extravasations, and swelling of epithelium of blood-vessels, especially of capillaries. 5. In miliary tuberculosis of the lungs: diffuse infiltration of interstitial tissue with granulation elements; miliary tubercles.—*Lon. Med. Record.*

Ovariectomy.

In a lecture on the operation of ovariectomy, delivered at the Harvard Medical School (*Boston Medical and Surgical Journal*), Dr. JOHN HOMANS stated that he had opened the abdomen for various purposes two hundred and three times. He further says, "I have done the operation of ovariectomy one hundred and fifty-nine times. My first five cases of ovariectomy were performed without any antiseptic precautions whatever, and all died. In the next one hundred cases I used antiseptic agencies, including spray. Of these thirteen died and eighty-seven recovered. Since then I have operated for ovariectomy fifty-four times, with four deaths. My last thirty cases have all recovered. I ought, in this connection,

to say that I have never declined to operate but once, the patient in that case having been already tapped to the amount of two thousand two hundred and seventy pounds in five years. I have operated upon all the other cases that have come to me, and although my late continued success is doubtless owing to good fortune, I feel that I can now perhaps do the operation better than I could at first." With regard to the spray, he says, "I always use the spray, and need a steam atomizer. I do not believe that the spray is absolutely essential, but I have had very good success with it, and have never known that it has done any harm." He uses ether as an anæsthetic, and prefers to have seven assistants, whose duties are carefully assigned before the operation.

The steps of the operation are these: 1, make the incision down to the rectus muscle; 2, stop all bleeding in the abdominal walls; 3, open the abdomen and explore for adhesions; 4, tap the cyst as high as possible; 5, detach the adhesions; 6, draw out the cyst and clamp the pedicle with Dawson's clamp, burn it off with the cautery, tie it and remove the clamp; 7, examine the other ovary and remove it if necessary; 8, thoroughly sponge out the abdominal cavity; 9, close the wound; 10, apply the dressings, and put the patient in bed. He ties the pedicle with carbolized silk ligature.

After the operation the patient should be left alone with her nurse, and should be allowed to sleep as long as she will. Sometimes there is vomiting, and sometimes not, but nothing need be done for it. As a general rule, the temperature is not much affected; it rarely rises above 100° F. during the whole convalescence. An opiate is generally required during the first twelve hours

after the operation, and sometimes never again. He generally gives one-sixth grain of morphia or its equivalent in solution by means of Bigelow's opiate enema syringe, which holds a drachm of fluid, and was figured in the *Boston Medical and Surgical Journal*, vol. xvi. (1877), p. 360. The cardinal principle in taking care of a patient after ovariectomy is to give all opiates and stimulants *by the rectum* until flatus passes the bowels, or until all symptoms of nausea or vomiting have been absent for many hours.—*Med. Times*.

DISEASES OF CHILDREN.

Points in the Management of Diseases of Children.

El Dictamen quotes the following aphorism by Prof. LEDAMENDA:

1. Children are like the mob: they always complain with reason, although they cannot give the reason why they complain.

2. Always look at the lips of a pale and sickly child; if they are of a deep red color, beware of prescribing tonics internally. At the outset you will congratulate yourself, but in the long run you will repent of having employed them.

3. As a general rule, a sad child has an encephalic lesion; a furious child an abdominal one; a soporific child has both, though indistinctly defined.

4. An attendance on children produces in the mind of an observant physician the conviction that the half, at least, of adult transgressors are so through morbid abdominal influences.

5. A sunny living room, a clear skin, and an ounce of castor oil in the cupboard—these are the three great points of infantile hygiene.

6. To dispute the clinical value of tracheotomy in croup is a waste of time to no good purpose. Croup or no croup, if there be a positive obstruction to respiration in the larynx it is but according to reason to open a way for sublaryngeal respiration. In the days of more knowledge and less nonsense, tracheotomy will be ranked among the minor surgical operations.

7. In the dentition it is not the direct or eruptive pressure, but the lateral pressure of all the teeth together, that is most dangerous. It is from this that so many cerebral symptoms appear which can in no way be relieved by incisions in the gums. The only recourse against the danger of this transverse pressure is to give the child more nourishment, in the hope that, as the general condition is bettered, the local condition will also be improved.

8. If the incisors of the first dentition are serrated, it is bad, but if those of the second formation are the same, it is worse. It foretells a number of lesions, arising from deficiency of mineral salts in the tissues. There is only one exception, and it is an important one. When the serrated incisors are seen in strong children in whom the fontanelles have closed early, it is a sign of a robust constitution. Instead of a number of small and sharp indentations, there are a few large blunt ones.

9. To regard the eruption of the teeth as the sole factor in the general process known as the first dentition, is to perpetuate a sort of medical synecdoche. Children get their first teeth because they are at the same time getting a second stomach and second intestines.

10. The body of a child possesses such a degree of "acoustic transparency," that, in case of necessity or convenience, auscultation may be practised

with the hand, converting it into a telephone, which will reveal as much to the physician as even his ear could do.

11. In practice it is well to distinguish with precision a case in which disease is due to lumbricoids, from one in which lumbricoids are due to the disease; for, in the former case, anthelmintics are of service, but in the latter they do harm.

12. Since, until the child is able to talk clearly his relations with the physician are purely objective, it is very necessary that we should study as carefully as do the veterinarians, the exact correspondence between the lesions and the expressions of the patient.

13. If you wish to cure rapidly and well, joint-diseases in infants, you must treat them as you would a conflagration,—douches, douches, and more douches, until you have succeeded in extinguishing them.

14. The entire system of the moral relation between children and adults should be changed. To speak to them incorrectly, merely because they cannot pronounce well; to excite their fears and to arouse their weird imaginations, simply because they are easily frightened and impressionable; to stimulate their vanity because they are naturally inclined to be vain,—these and other similar actions are not only wrongs, but absurd.—*Med. Age.*

The Prognosis and Treatment of Scarlatina

Was the subject adopted at the last meeting for discussion at this time. Dr. M. C. O'CONNOR, of New Haven, chairman of the committee to report upon the question, read an elaborate review of the teachings of various authorities upon the subject. A summary of the more important conclusions deduced is as follows :

There was scarcely a disease in which

the element of uncertainty entered so largely as in scarlet fever. The various types, forms, and complications, as well as the epidemic influence prevailing at the time, had great influence in determining the tendency toward death or recovery. The mortality was greatest in infants and in children under five years. In the puerperal state it was almost invariably fatal. Flint stated that he did not know of an instance of recovery. Occurring during pregnancy, it almost certainly ended in abortion.

In the prognosis of individual cases caution was necessary. Apparently mild cases were not free from the danger of severe complications and sequelæ. Unusual malignancy of the disease might cause intense prostration, coma, and an early fatal termination. High initial fever, severe throat affection, and great depression indicated danger. Convulsions, especially occurring early, were of unfavorable import. Laryngitis usually proved a fatal complication. Very severe inflammation of the fauces, extending to the neighboring glands and connective tissue, rendered recovery doubtful. Gangrene of the mouth and hæmorrhages from the mucous surfaces were also of grave import. The same was true of cardiac affections. Renal complications involved great danger. They should be anticipated by daily examinations of the urine. Even after the albumin had disappeared the patient was not safe if casts continued. Slight delirium at night in mild cases was not a serious symptom, but, if active and constant, more grave. The rheumatoid condition of the joints, frequently noticed, was rarely serious. A scrofulous constitution predisposed to glandular complications. An early favorable prognosis was to be avoided. Some patients died after the fever had left them, from anæmia produced by the fever. Sudden

and unexpected deaths sometimes occurred from uræmia, but were more frequently due to the formation of ante-mortem heart-clots.

Scarlet fever could not be shortened or aborted by treatment. Mild cases did not require active treatment, confinement to the bed being sufficient, with milk diet and attention to the bowels, the application of some mild liniment, such as camphorated oil, to the neck, and a chlorate-of-potassium mixture for the throat. Severe cases required more heroic measures. Hyperpyrexia might be effectively combated by the external application of cold water. This would diminish the heat of the body and the frequency of the heart's action. Sleeplessness, restlessness, and delirium were also relieved thereby. Quinine might be applied for the same purpose, given in five-grain doses three times a day to children of five years. Aconite and veratrum viride were less suitable on account of their depressing effect. Digitalis was better, but inferior to quinine.

Itching of the skin and great restlessness, due to irritation of the peripheral nerves, might be relieved by inunctions with olive-oil, bacon-rind, cocoa-butter, and similar preparations, more effectually than by tepid sponging. Five or six drops of carbolic acid might be added to each ounce of fatty matter or of vaseline.

A tendency to prostration could be avoided, and the strength of the patient sustained, in severe cases, by alcoholic stimulants. Wine—either port, sherry, or Madeira—was usually preferable for children, administered in small quantities with water, arrow-root, jellies or other light nutriment.

If the throat was severely affected, the swallowing of lumps of ice was grateful to the patient. In some cases the inhalation of hot steam seemed to give

more relief. Chlorate of potassium was now generally considered an important remedy. From half a drachm to two drachms might be given in divided doses during twenty-four hours. Tincture of the chloride of iron was a useful addition. Chlorine-water was highly recommended by Watson and others.

Local applications were useful if properly applied. Little difficulty would be found in making the applications if a long wire-handled camel's-hair throat-brush was used to paint over the affected parts, and if promiscuous swabbing, which was not beneficial, was avoided. The mixture containing carbolic acid, solution of the subsulphate of iron, and glycerin, recommended by Professor J. Lewis Smith, acted most satisfactorily. This also answered well when there was a sloughy condition of the fauces. The spray was more difficult to use in these cases than the brush. Gum guaiacum had been used in scarlatinal sore throat, but without any marked benefit.

If there was much implication of the Schneiderian membrane, the above-mentioned mixture might be diluted, and syringed into the nostrils. This would prevent decomposition, remove the offensive odor, and guard against blood-poisoning. Carbolic acid and water (1 in 200) might be used for the same purpose.

Swelling of the neck should be met in the early stages with cold compresses, which after a day or two, if the throat was not benefited, could be exchanged for warm applications, as of spongiopilin dipped in hot water, or light, hot linseed-meal poultices frequently renewed. If there was any tendency to suppuration, the pus should be evacuated as soon as it could be detected, so as to prevent purulent infiltration of the tissues of the neck.

The painful condition of the ear could generally be relieved by dropping a little laudanum and sweet-oil or glycerin into the ear, and the application over the ear of a poultice of steamed hops frequently renewed. If otorrhœa occurred, the ear should be syringed with hot carbolized water.

Convulsions should be controlled, as far as possible, by the inhalation of chloroform and the application of cold to the head. The action of the kidneys should also be carefully watched.

Uræmic phenomenon required prompt attention. A saline purgative or the compound jalap-powder was to be employed to eliminate urea. Fomentations over the loins and dry cups should be used. Diaphoresis should be produced by hot-air baths or by pilocarpine. If the urine was scanty, mild non-stimulating diuretics should be administered—such as the salines and digitalis, the diuretic *par excellence*. In the meantime the strength of the patient should be supported by light but nutritious diet, and a liberal allowance of wine. Extensive anasarca required the use of cathartics and diuretics. In less acute cases of albuminuria, or where the albumin was gradually disappearing from the urine, the tincture of the chloride of iron produced a very excellent effect.

Restlessness might be relieved by cold applications to the head, warm mustard foot-baths, and the bromide of potassium. If these measures did not produce quiet and sleep, anodyne remedies, such as belladonna or hyoscyamus, might be required. If these failed, opiates could be given, but they should be used with great caution, particularly in children, or if uræmia threatened.

Nausea and vomiting could generally be relieved by the sucking of small pieces of ice, or by the use of cold carbonated water.

Rheumatic complications were best treated by saline laxatives and diuretics, while severe pain was relieved by anodynes. Salicylate of sodium had not proved beneficial, and was likely to increase the irritation of the kidneys if they were at all affected.

Constipation should be relieved by simple enemata rather than by cathartics unless there were other indications for the use of the latter.

In malignant cases all measures frequently proved unavailing. Cold affusion was most useful in the ataxia form of the disease. Alcoholic stimulants must be used at the same time. Carbonate of ammonium and mustard-baths might also be employed.

During convalescence, exposure to cold must be guarded against, and iron and other tonics should be administered internally. During this period scrubbings with carbolic soap, or detergent baths with carbolic inunction should be practiced for the purpose of disinfection. The New York Health Board advised the disinfection of clothing, etc., with a solution of sulphate of zinc or carbolic acid.

The weight of evidence was opposed to the belief that belladonna had any prophylactic value against this disease. It might be given in the form of the extract dissolved in cinnamon-water, with the addition of a few drops of alcohol to prevent fermentation.—*N. Y. Medical Journal*.

Acute Vomiting in Infancy Treated by Nutrient Enemata.

A. WITHERS GREEN, M.R.C.S., L.R.C.P., London, reports the following case in *Lond. Med. Times*, September 27th: H. Edward H. is a rickety, bottle-fed child 7 months old. On September 6th it had a bottle of milk which was somewhat sour, but went to rest as

usual. During the night the child was seized with vomiting and diarrhœa. I was called to see it at 5 A. M. On the 7th I found the eyes sunken into their sockets great pallor and listlessness. The infant was cutting its right upper central incisor. I lanced the gum and ordered one teaspoonful of castor oil. After the oil had acted the diarrhœa ceased, but the sickness was unabated. Milk, whether fresh cows', condensed, or artificially prepared human milk, was not retained, neither was barley water, rice water, beef tea nor raw beef juice; in fact everything was pumped up unaltered, 'sometimes seeming hardly to have got it into the stomach. By the evening of the 8th the child had been some hours passively convulsed or else very restless, extremities at time cold and fontanelle very depressed. Lime water, bismuth, hyd. c. creta, gr. 1-4 every four hours, tinct. opii minim 1-8, tinct. iodi minim 1-4, creosote minim 1-12, glycerinum boracis, all seemed useless. Nutrient enemata were now commenced, after my evening visit on the 8th, and were continued until the morning of the 12th, as nearly as possible every two hours. The enemata were in amount two tablespoonfuls with a half teaspoonful of brandy in each, and consisted sometimes of condensed, or fresh cows' or artificially prepared human milk, sometimes of beef tea of different kinds all slightly warm. After a few times the child kept quite quiet while the injections were being given, and seemed revived after them. None of them were returned. Since the nutrient enemata were commenced the bowels have acted twice daily, gradually getting less slimy, and more natural. For rather more than three days and three nights no nourishment was taken by the mouth, the lips being moistened with brandy and milk.

On the 8th a warm vinegar-and-water compress was kept most of the day round the waist, and since the 9th one tablespoonful of cod-liver oil was rubbed into the chest after washing the child each morning. During the night of the 11th beef tea, made with Liebig's extract of meat, was kept on the stomach, one tablespoonful about every four hours. On the same day the child smiled and seemed hungry, but was sick if more than a small quantity was given at a time. From the time the stomach began to retain beef tea, bismuthi subnit. gr. 1-2, with tinct. opii minim 1-8 was given when any sickness or retching occurred and seemed to do good. On the 13th half a teaspoonful of cod-liver oil began to be given three times a day by the mouth. On the 14th half a teaspoonful of steel wine began to be taken as well. Though the beef tea was the first thing retained by the stomach the child soon began to refuse it, preferring its bottle of cows' milk (boiled) and water. The parents considered the issue highly satisfactory as they thought their child was for some days a little better than a corpse while now it is daily gaining strength and vigor.—*Med. and Surg. Jour.*

OBSTETRICS.

Extra-Uterine Pregnancy.

Several weeks since, Mr. LAWSON TAIT reported, in the *British Med. Jour.*, a series of five cases of extra-uterine pregnancy, operated upon at the time of rupture, from the tenth to the thirteenth week. Four were successful. In each he removed the fallopian tube, the pregnancy having been tubal. In his own words: "These cases all confirm the view of the pathol-

ogy of extra-uterine pregnancy which I advanced many years ago, that in origin it is always tubal, and that its varieties depend merely upon the direction in which rupture occurs. These results also confirm the policy of early interfering in such cases, for four out of the five have been easily and completely cured of one of the most formidable conditions of pregnancy. The first and only fatal case might have had a better ending if Mr. Spachman had seen her sooner, for he recognized the case at once and sent for me."—*Can. Med. Record*.

Diagnosis of Pregnancy.

There are many *opprobria medicorum*, but among them there is none more glaring and more hoary with years than the uncertainty which surrounds the question of the diagnosis of pregnancy, especially during the period prior to quickening. The question has engaged the attention of medical men from the earliest times, but they have as yet failed to discover a sign of pregnancy, the existence of which would justify them in positively declaring the woman presenting it to be enciente, or the non-existence of which can be taken as indubitable proof that the uterus does not contain an impregnated ovum. Of the many signs given not a single one can stand alone, and is of value only as it is supported by others, which are in turn dependent on it for support.

Among the latter symptoms which have been advanced as having value is that known as Jorissenne's which depends on the supposed variation in the rapidity of the pulse in the sitting and standing positions in the pregnant woman. Under ordinary circumstances there is a variation of from ten to twenty beats between the pulse in these positions, but during pregnancy, as in

the condition of cardiac hypertrophy, as noted by Graves, no such variation occurs. This symptom is, however, no more reliable than any of the others, and of value only in the consensus of the whole.

Diagnosis of Pregnancy.

Dr. HENRY D. FRY calls attention, in the October number of the *American Journal of Obstetrics*, to the value of elevation of temperature of the genital tract as a sign of pregnancy. He made observations on ten pregnant women, noting the frequency of the occurrence of the various signs most implicitly relied on as aids to the diagnosis of this condition—backache, leucorrhœa, the purple color of the vaginal mucous membrane, and the vaginal temperature. Backache was noted in four multiparæ; leucorrhœa in five; the purple color of the vaginal mucous membrane in seven; and the vaginal temperature was elevated in eight. The elevation was $1\ 1-10^{\circ}$ F. in five of these cases, and $1\ 1-5^{\circ}$ F. in three, the normal temperature being regarded as 98.6° . The increase is doubtless, due to the congestion of the uterine structures, incident to impregnation, the hyperæmia being necessary to the nutrition, growth and physiological development of the organs concerned. The elevation of uterine temperature produces, directly, some elevation of that of the vagina. It is true any pathological condition of the uterus sufficient to increase its temperature has a similar effect on the vaginal temperature, and herein is the sign unreliable in itself. The sign, therefore, while a valuable one, is not characteristic.—*Med. Age*.

Meconium in its Forensic Aspects.

Dr. J. CH. HUBER (*Friedreich's Blätter für Gerichtl. Med.*, 1884, pp. 24, 142)

treats this subject elaborately, and gives a bibliography extending from the time of Aristotle downward. According to his own observations, the most important substance found in meconium is that greenish-yellow body which more especially determines the color of the dark greenish-black masses. These bodies, which Tardieu admirably depicts in his *Study of Infanticide*, are mostly of oblong, elliptical, oval, or roundish contour, and are not unfrequently flaky with rounded angles. In size, they range from that of a microcyte (and less) to that of a squamous epithelial cell from the tongue. As these bodies, which appear to be altogether homogenous in structure, are enveloped in mucus, it is very difficult to ascertain how they behave toward chemical reagents, which penetrate them slowly. They are unaltered by acetic acid and by ether, but dissolve in solution of potash. The bile-pigment reaction has been obtained from them by good observers. It is more difficult to decide what is their basis (albumin or keratin?), whence they arise. When we take into consideration the abundant shedding of epithelium in the small intestine of the fœtus, Huber cannot avoid the conclusion that we have here to do with intestinal epithelial cells, which have become swollen, confluent, and disintegrated. On account of their frequently characteristic form, and the ready possibility of their detection in dried meconium stains, he holds these bodies to be of great importance, and, at any rate, as much more characteristic than those amniotic elements which have been swallowed.—*Med. and Surg. Reporter*.

Puerperal Mastitis.

In the *Archiv f. Gyn.*, Bd. 22, Hft. 2, Dr. OTTO KÜSTNER discusses the ques-

tion whether puerperal mastitis can ever arise from the retention of milk within a milk duct. He has observed cases that have made it certain (to himself) that mastitis can be produced in this way. For a long time he held the views promulgated by Billroth and Winkel, that mastitis is invariably a secondary process, the result of infection, that the source of infection lies in rhagades and excoriations of the nipples, and that the accompanying milk retention is caused by swelling of the glandular tissues, but his observations have now led him to change his opinion. Schroeder considers blocking of the milk or stasis to be the most frequent cause of mastitis. Küstner, on the other hand, believes that the affection only rarely arises in this way. When it does, the patient has only suckled her child a short time or not at all, and rhagades have never been present. These cases run a milder course in regard to fever, pain, and redness than those inflammations that arise from infection. The infiltration may be dispersed by pressure with the elastic bandage; in other cases the redness is circumscribed, and distinct fluctuation indicates incision. No pus, however, escapes, but milk in various stages of condensation. In such a case wide incisions, drainage, and antiseptic washings-out are unnecessary. The wound generally heals quickly under a compress, and without the accumulation of fresh secretion.—*Medical Journal*.

Castor Oil.

The French method of administering castor oil to children is to pour the oil into a pan over a moderate fire, break an egg into it, and stir up; when it is done, flavor with a little salt or sugar, or current jelly.—*Col. and Clin. Record*.

DISEASES OF WOMEN.

Cystitis in the Female; its Treatment by Dilatation—Operation for the Closure of an Urethra Torn by too Heroic Dilatation.

Clinical lecture by Prof. WILLIAM GOODELL (*Medical Bulletin*):

This unfortunate woman had her last labor three years ago, and it, like her previous confinements, was a difficult one, requiring the use of instruments. After this labor she found that she was for some days unable to pass her water. This was followed by cystitis. Whenever you have a patient, whether male or female, who has the water dribbling away, do not be caught as many physicians are, and suppose the bladder is empty. This is often the dribbling from an over-distended bladder. The nature of the difficulty was promptly recognized and the water drawn, but after convalescence she found that she had cystitis. The cystitis, which had developed, went from bad to worse. She passed from one physician to another. She finally passed into the hands of an excellent surgeon, who dilated the urethra, but the dilatation did no good. This is an excellent plan in chronic cystitis and in those peculiar bladder troubles which cannot be exactly explained, but which are probably examples of nervous or hysterical bladders. There is, however, a drawback to the operation, and that is, that if the urethra is over-stretched, permanent loss of control over the urine is liable to follow, and this is a grave accident. This is one reason why, in the case of calculus in the female, if the stone is larger in girth than the index finger and cannot be crushed, it is wiser to remove it through an opening made into the bladder than to remove it through the urethra.

In the present case, the surgeon, finding that the dilatation had done no good, repeated the operation. This time the dilatation was very great and there has been considerable laceration of the urethra. This was not followed by relief, and this shows the excessively intractable character of the disease.

The surgeon then, very properly, made an opening into the bladder, forming an artificial vesico-vaginal fistula. This partly closed up and she sent for me. Her face, as well as her story, plainly showed how much she had suffered. I brought her to the hospital and enlarged the opening into the bladder. I afterward swabbed out the bladder with a solution of nitrate of silver, of the strength of one drachm to the ounce of distilled water. My assistant carried out this treatment, applying the nitrate of silver several times. The strength of the solution was gradually reduced, and she left the hospital much improved. She finally got so well that I closed up the opening into the bladder. The trouble now is that the dilatation of the urethra has been so great, that she has no control over the urine, which flows away as rapidly as it enters the bladder, and produces an excoriation, which is very distressing. I told her frankly that I was not sure that I could cure her, but that I thought that I could help her. The dilatation has involved the whole canal, and all the muscular fibres have been over-stretched. The dilatation has been so great that although I narrow the urethra, I am afraid that I shall not gain much retentive power.

This urethra is very badly torn, the laceration being posterior; more commonly it is anterior.

When you have a case of nervous bladder, you do not at once go to work and perform the operation. The first

thing to do is to treat the case for nervousness. The best treatment is the Rest-treatment, of which I have spoken so often. Put the patient to bed, have her manipulated, use electricity, give a milk diet, and, after a time, she will get a real appetite, and then she can be fed up. Women eat enormously under these circumstances. She grows fat and the cystitis disappears, for it was the evidence of lack of nutrition. There are some of these cases which cannot be cured, and the same is true of cystitis.

How are such cases to be treated? They are to be treated by forcible dilatation, but this operation is to be done with care. In regard to the extent of the dilatation, I should advise you to begin the dilatation with the uterine dilator, then introduce the little finger of the left hand and dilate to this extent, and only in bad cases dilate to the extent of the forefinger. My own forefinger is not very large, but yet I rarely dare to dilate to its full extent. In one case in which I used my forefinger the operation was followed by a partial loss of control. When the lady coughed or laughed there would be a little gush of urine, as time went on the condition improved, but she never gained full control.

Let us speak of the treatment that is suitable for cystitis, especially in women:

It is not always easy to draw the line between simple irritability of the bladder and a true inflammatory condition, for sometimes there will be a deposit in irritable bladder. Of course if there be a large quantity of stringy mucus or pus, the nature of the case is evident. When a woman comes to you with a trouble of this kind, one of the best remedies by the mouth is belladonna in some of its preparations. It is always a good plan to test the urine. If it is

acid, alkalies in large doses may be given, while, if it is alkaline, acids will be given. It is also a good plan to give a remedy to act on the kidneys and dilute the urine. Sweet spirits of nitre or buchu may be given in combination. A very excellent preparation is one containing bi-carbonate of soda, belladonna, sweet spirits of nitre, and buchu. It will, however, be found that if the case is one of true cystitis, local treatment must be employed. This consists of introducing a catheter, emptying the bladder and injecting various solutions. The preparation which, taking it all in all, is the best in chronic cystitis, is a solution of nitrate of silver, beginning with two grains to the ounce and gradually increasing the strength. When a strength of from twenty to sixty grains to the ounce is used, the solution must be allowed to remain only a short time. The reason why there is a certain amount of tolerance on the part of the bladder to these strong solutions of nitrate of silver is, that almost at once a pellicle of chloride of silver is formed which prevents the action of the remedy. When the strong solutions are used they cause considerable pain, and the hypodermic syringe should be ready to use if necessary. These solutions should be allowed to remain only for ten seconds. After the solution flows out a solution of common salt may be injected. This is perhaps the most efficacious treatment, but anything that will wash out the bladder will do good. A solution of nitric acid, from two to five drops to the ounce, is often of service.

If these measures fail, one of two things may be done: One of these is to introduce a self-retaining catheter. This should be a Goodman catheter, which is short and does not hit the fundus of the bladder, for, when any-

thing passes the neck of the bladder and irritates the cavity, the bladder spasmodically contracts. This reminds me to say that when you have to draw the urine in a case of irritable bladder or in cystitis, the catheter should not be passed beyond the neck of the bladder. The instrument should be passed slowly, and as soon as the urine begins to dribble, it should be arrested at that point. If the catheter touches the inner surface of the bladder you will feel the organ grasp the instrument, giving the same sensation as is felt when you suddenly turn a spigot through which water is flowing. A self-retaining catheter will sometimes do good by drawing off the residual urine and keeping the bladder empty. The objection to this is, that few women will permit a self-retaining catheter to remain, as it is too irritating.

The other plan is to make an artificial vesico-vaginal fistula. This is done in the following way: A sound is passed into the bladder, its tip turned backward, and an opening is made on the end of the sound, midway between the neck of the bladder and the cervix. Care must be taken not to open the neck of the bladder, for there are antagonistic muscular fibres in this locality which would interfere with union when the time comes to heal the fistula. How will the opening be made? One plan is to use Pasquelin's cautery, because the walls of the bladder are much thickened. This thickening is due to several causes. One is the long standing inflammation; another is the contraction of the muscular fibres, causing hypertrophy; and a third is, that the bladder being empty, its walls are thickened. The resulting thickness causes great difficulty in keeping the opening patulous. If the opening is made with the knife, it will be necessary to introduce

a tube to keep the opening from closing. There are little glass eyelets with a shoulder on each end, which are made for the purpose. Stitching the vesical edge of the wound to the vaginal edge will prevent union, and this should always be tried when practicable.

I have now denuded the parts and placed a number of stitches. I have learned a little lesson in these cases, and that is, that it is not necessary, and, indeed, the success is greater if a catheter be not used. Formerly I always used a catheter, but this tends to prevent union by the first intention. In my later cases I have omitted the catheter, and have obtained union even when the woman was allowed to pass water herself. If she cannot pass it, I use a small catheter. I am afraid this operation will not be successful, for the reason that the dilatation has been made higher up. If it fails I shall dilate the urethra with the fenestrated urethral dilator, and then pass in Pasquelin's cautery, heated to a dull heat, and cauterize the part to see if I can diminish the calibre of the urethra in that way.

As regards the diet in cystitis, skim-milk is, I think, really the best. Sometimes cases can be cured with skim-milk which are not influenced by ordinary diet. Pepper, highly stimulating food, and everything irritating must be avoided.

I told you that this trouble had been caused by the birth of a child. It was due to the squeezing of the bladder between the child's head and the pubic bone. That is, however, not the only way in which cystitis may be developed after labor. A number of incurable cases have occurred in women from retention of the urine.

I have introduced five stitches, and you can see the result of the operation. We shall give no medicine whatever. I

shall not order the parts to be syringed for fear that the nurse may overdo it. In one week, or perhaps a little longer time, I shall remove the stitches, and I expect to find a perfect union, but I fear that while the operation will afford some relief, it will not prove a perfect success.

There are other remedies given in the text-books to which I have not referred. Among them is benzoic acid, which will sometimes act efficaciously. When you have a bad case of cystitis you are not going to cure it by remedies administered by the mouth. Irrigation with a double catheter is a good thing. A German physician has irrigated the bladder with healthy urine for the cure of cystitis. This was done with success. In this case it was a male who had cystitis, and his wife's urine was used for injection. There is a plausibility about this, for healthy urine is the fluid which should be least injurious to the bladder. I think that this method might be tried with advantage.

[There is nothing new about cystitis in this lecture, but we find Dr. Goodell indorsing some of the means used in treating cystitis that we hoped he had outgrown. It is doubtful if there ever was a case of cystitis cured by dilating a normal urethra. In case of urethral stricture, causing cystitis, relief might come from dilating the stricture, but that is about all.

We are a little surprised to hear that the author of this lecture favors the irrigation of the bladder with healthy urine. This has always appeared like therapeutic nonsense.

Why should normal urine, when passed into the bladder through the urethra, cure cystitis, when it has no good effect when it enters the bladder through the ureters? Perhaps we are not up in this kind of pathy. There

may be something in it. While trying it, let the author of the paper also try to cure enteritis by irrigating the bowel with healthy fœcal matter.]

A. J. C. S.

Insanity of Menstruation.

Dr. REGIS (*Journal de Médecine de Bordeaux*) says that the mental state of females is, as a rule, more or less affected during menstruation. Bertheer was of opinion that psychoses of menstrual origin were in many cases closely allied to the transitory insanities; they, as a rule, were short attacks of mania or melancholia. When, however, the affection was due to interference with the proper performance of menstruation, then the affection lasted longer. As a rule, acute mania is the most common type presented, but an acute hallucinatory psychosis is far from infrequent. Nymphomania, kleptomania, homicidal impulses, incendiary impulses, dipomania and suicidal impulses are often the insanity of menstruation properly so called. In the great majority of cases the appearance of the menstrual flow is an evidence and consequence of intellectual improvement. In a few cases it is the cause.—*Alienist and Neurologist.*

Disappearance of Symptoms of Spinal Atrophy Following the Removal of the Ovaries and Fallopian Tubes.

Dr. MUNDE reports the removal of the ovaries and fallopian tubes of a lady, 32 years old, suffering from symptoms of spinal atrophy for seven years. She had been bedridden, unable to walk, during this period. A vaginal examination showed retroversion of the uterus and a prolapsed, tender ovary. All efforts to relieve this condition failed. Oöphorectomy was suggested, but

abandoned because of the small chances of relief promised thereby.

No relief coming to her by other treatment, she requested that the operation be done. After due deliberation and consultation it was agreed upon to give the patient this small chance of relief. Four days after the operation she moved the toes of the left foot, the first time in seven years. In one week she bent the left knee. In fifteen to seventeen days she began to learn again to walk. She did not drag the left foot, as formerly, in attempts to walk, but placed it directly forward. Two months after operation she was able to walk unassisted the full length of a double room.—*New York Medical Journal*.

Chlorosis.

The *Medical Press* publishes the following as an excellent pill in chlorosis: $\mathcal{R}$. Ferri sulph.; sodæ bicarb. ana, 3 j.; pulv. tragacanth, gr. vj.; syrapi, q. s. Divide into forty-eight pills, and let one be taken thrice daily. Later, two may be taken instead of one.

Urethral Caruncles.

Dr. WM. H. WATHEN, M. D., (*Med. Herald*): Urethral caruncles attached to the mucous membrane of the female urethra, are usually from the size of a millet seed to that of a wild cherry, but have been seen much larger. Those writers who claim to have seen these growths as large as goose eggs evidently confound them with some other pathological condition.

They are of a deep red or bluish red color, covered by a thick and fragile mucous membrane, and often bleed freely when touched or during urination. They are generally attached at the entrance or in the lower part of the urethra, but may grow higher up, and

are sometimes found near the neck of the bladder. They may be pediculated or sessile, in some instances having a wide base.

The surface of the tumor is generally irregular or lobulated. It is easily broken down, and it is difficult to seize it with a tenaculum or forceps without going beneath its base into the healthy tissues. It seems to be a mass of vessels loosely held together by connective tissue and covered by imperfectly developed mucous membrane. The tumor has been called "dendritic papillary new formations of connective tissue." The texture is sometimes spongy, and when moistened in a solution of common salt or sugar, blood-vessels can be traced and other ramifications found similar to that of the vasa vorticoso of the choroid. Vessels of large size may be seen entering a lobule and dividing into a great number of small ones, which make numerous undulations and terminate in abrupt loops at the periphery, with walls like those of capillaries.

In these tumors may also be found epithelial cells and capillaries coming close to the surface, which would explain the decided tendency to bleeding. A rich supply of nervous filaments, terminating in bulbous expansions, resembling neuromas in construction, are sometimes found. It is contended by some authors that the caruncle has no sensitive nerves in its periphery, and that the pain is the result of an abundant supply of sensitive filaments in its base, but from the fact that the slightest touch from a camel's-hair brush will cause sometimes intense pain we are constrained to disbelieve this. The growths may not be always pathologically identical, since some of them are exquisitely sensitive and others are painless—one may be supplied with sensitive nerves,

the other may not. We may, then, reasonably conclude that the urethral caruncle is generally supplied with sensitive nerves, and it is formed of numerous vessels and embryonic tree-like vegetations of cellular tissue, due to an excess of development of the mucous papillæ.

In those cases of urethral caruncles that require treatment the first symptoms complained of are dysuria and hemorrhage in urinations; but in other cases there is no marked symptom, and the woman may not know that she has a caruncle, and if the tumor is detected it is by accident in a vaginal examination. The caruncle may be painless or as sensitive as a neuroma.

The dysuria may be slight or so severe that the woman will retain her urine for hours in dread of pain, and then pass it in a secluded place where others can not hear her cry and moan. Dyspareunia is often so marked as to prevent sexual intercourse. Friction of the parts in taking exercise, etc., may cause pain and hemorrhage. Sympathetic symptoms are often as well marked as in diseases of the uterus, rectum or bladder; and we may have all the nervous manifestations observed in these troubles. The woman may have reflex pains in any part of the body or any form of hysteria.

There is often a sense of weight or pressure in the pelvic organs. The retention of urine may cause irritation or inflammation of the bladder. There may be incontinence of urine. The bleeding in urination, or when the caruncle is touched, may be slight or very profuse, sometimes causing the woman to become anemic. There is sometimes a mucous muco-purulent discharge.

In making a diagnosis of urethral caruncle we should take the subjective symptoms as a guide to objective explo-

ration, and it would appear that any ordinarily intelligent physician would suspect the cause of his patient's trouble.

In making a physical examination it is best to put the woman on her back with her thighs well flexed, but the left lateral position will do. By separating the labia the caruncle can be seen if it is at or near the entrance of the urethra, but if high up the urethra must be dilated to expose the tumor or a urethral speculum must be used. We can dilate with any ordinary dressing forceps or any form of metallic uterine dilators. Nasal or aural speculums will do, or we may expose the caruncle with a small fenestrated glass speculum. I devised, some years ago, a trivalve speculum that serves the purpose admirably. It is also used as a dilator, and the blades are so small that they obscure but little of the urethral walls, thus enabling us to see the caruncle and to remove it with more facility than by any other means. The exposed caruncle can readily be diagnosed and resembles a small internal hemorrhage probably more than any other morbid growth. There may be but one or quite a number. The urethra may be dilated or spasmodically contracted. I have seen it badly fissured and ulcerated. In one of my patients the lower third of the urethra had sloughed and the surrounding tissue was very hard and unhealthy.

The caruncle is often due to chronic urethritis. The disease is common with prostitutes, and there is frequently a previous history of gonorrhœa. It may result from secondary syphilis. No age or condition is exempt, and the caruncle is found in the girl before puberty and in old age. It is more frequent about the climacteric, caused by the tendency to venous hæmostasis of the pelvic organs, especially of the mucous membranes.

If the caruncle is not painful and causes no inconvenience, it is well not to interfere with it, lest it repullulate in a sensitive form; otherwise we should do what we can to relieve the woman. If she will not consent to its removal we may use such palliative means as warm applications or apply locally sedative or anæsthetic ointments, as dilute hydolygenic acids, two drachms to an ounce of roseline, or ointment of chloroform, aconite in any of the local anodynes, but we can only expect from this treatment a little temporary benefit. But in most instances of painful caruncle the woman will submit to an operation, and it should then be removed thoroughly.

Authors say there is always a great tendency to return, and unless the growths be entirely removed this is true, but otherwise I am constrained to take issue with them. I have operated many times and can not remember any patient who was not perfectly relieved, though some of them had been operated on by others several times previously with but little benefit. If any particle of the growth remains its proliferous or germinating properties are so active that it will almost certainly reproduce the disease.

The cautery or the ligature alone is seldom successful and should not be used. The only treatment that will be successful is to remove the caruncle with the knife or scissors beneath its mucous attachment, and then its base may be cauterized with the galvanic cautery, the red-hot iron, burning nitric acid, etc. It should be exposed and a tenaculum introduced through the mucous membrane below its base and cut away with the tumor. If it is at the entrance of the urethra or protruding externally it can be easily removed, but if higher up the operation may be difficult. With my speculum the tumor can

be well exposed and removed with the knife or scissors and any form of cautery applied.

It is claimed that mashing or crushing the caruncle between the blades of a strong forceps will cure the disease. I do not believe that this treatment will be successful and will not recommend it. The growths successfully operated on by this means are not genuine caruncles.

In most cases we can operate without an anæsthetic, and but little after-treatment is necessary. We can usually dispense with the catheter, as the woman can generally pass urine without difficulty or pain. I often allow the patient to get out of bed on the second day.

The only complication that may annoy us is hemorrhage, and this will be insignificant unless we cut high up the anterior part of the urethra and divide a branch of the internal pudic artery that supplies the clitoris and parts of the urethra. I have had this to occur three times in my practice, and on one occasion the hemorrhage was for the time being apparently alarming, but was controlled promptly by tamponing the vagina so as to make firm pressure against the urethra. It may sometimes be necessary after tamponing to place a wedge of cotton over the entrance to the vagina and then apply a T-bandage. It is impossible to successfully tampon the urethra. I have devised a means by which I can now control the hemorrhage at will by means of a copper wire doubled upon itself so that when introduced into the vagina it presses evenly and firmly upon the urethra when the protruding ends are bent up over the symphysis pubes. I place a small pledget of absorbing cotton under the wire in the vagina and over the pubes so as to prevent pain or injury from pressure.

[The author of this paper omits the

most important facts regarding the pathology and treatment of urethral caruncles. It is now well known that these vascular and sensitive neoplasms about the meatus urinarius are caused by inflammation of the ducts of the urethral glands. The inflammation, when long continued, gives rise to hyperplasia of the tissues at the mouths of the ducts. It is also a fact that the only way to permanently dispose of such cases is to remove the abnormal growth and cure the inflammation of the ducts. If the latter part of the treatment is omitted the growth or caruncle will almost always return, no matter how the growth is removed. The discovery of the urethral glands and their ducts some years ago has entirely changed the views of the profession on the subject of caruncle of the urethra.]

A. J. C. S.

Hydrocele in Woman.

Prof. HENNIG, of Leipsic, read a communication upon this subject in the *Versammlung Deutsches Naturforscher und Aerzte*, in which he systematically considers the anatomy, etiology, clinical varieties, diagnosis, and treatment of this rare affection. He had found in medical literature forty-one cases, two of which had been under his care. Often the effusion in the canal of Nuck is complicated by protrusion of some of the viscera, which possibility must be taken into consideration. In some cases simple puncture, in others injection of iodine, was sufficient to obtain complete occlusion of the sac. Excision of part of the sac and packing the cavity with charpie, and in one case the ligatures (of iron wire), were also successful.—*Deutsche Medicinal Zeitung*.—*Med. Med. Jour.*

The Limits of Vaginal Hysterectomy for Cancer.

At the recent meeting of the American Gynecological Society, Dr. PAUL F. MUNDE read a paper on this topic, *Philadelphia Medical News*. He said that he had operated in two cases of uterine carcinoma by the method of vaginal extirpation. One case had survived the operation nine months, but the disease, as predicted by Dr. Heitzmann from a microscopical examination, had returned. The other case died from loss of blood.

He exhibited the uterus and annexa removed from these two cases. He desired to reply to Dr. Jackson's paper, read at the last meeting of the Society, in which the conclusion was reached that extirpation of the cancerous uterus was not justifiable. If Dr. Jackson had confined himself to the condemnation of Freund's operation, he would have fully concurred with him. Freund himself had given up this operation. Dr. Jackson's propositions were:

1. A diagnosis of uterine cancer could not be made sufficiently early to insure its complete removal by the extirpation of the uterus.

2. When a diagnosis could be made there was no reasonable hope for a radical cure, and other methods of treatment for ameliorating suffering or retarding the progress of the disease and prolonging life, were equally effectual.

3. Extirpation of a cancerous uterus was a dangerous operation.

He then proceeded to reply to Dr. Jackson's propositions by an array of clinical and statistical evidence. To the first proposition, alone, he partially assented. To the third, he presented the following statistics in reply:

Billroth's Clinic: Excision of mammary cancer, thirty-four cases, 20 per

cent. mortality; excision of lingual cancer, eighteen cases, 43 per cent. mortality; excision of rectal cancer, five cases, 53 per cent. mortality.

Rose's Clinic (Marburg): Mammary cancer, 26.30 per cent. mortality; lingual cancer, 11 per cent. mortality; rectal cancer, 53 per cent. mortality.

Schröder had recently reported one hundred and five high vaginal amputations, with a mortality of thirteen, or 12.30 per cent.; in Freund's operation a mortality of 62 per cent.; in thirteen supra-vaginal amputations by laparotomy, a mortality of 30 per cent. Of all cases collected of total extirpation of the cancerous uterus, two hundred and fifty-six in all (ten of these being American), sixty-two cases, or 24.6 per cent., died. Surely a good showing in comparison with the results of excision of cancerous tumors from other organs. The *Medical News*, of September 19, 1883, published in its editorial columns the mortality of one hundred and sixty-seven operations; fifty-two patients, or 31.13 per cent., had died. With increased experience, more perfect technique, and careful selection of cases, the mortality of total extirpation of the cancerous uterus would be brought down to a still lower figure.

Dr. Munde formulated his conclusions after this thorough *resume* of clinical observations and statistics as follows:

1. Limitations of the cancerous degeneration to the uterus and absolute freedom from disease of the parametrium. (Of course, the disease must extend above the level of the vaginal vault, and be ineradicable by simple amputation or excision.) If the finger in the vagina or rectum detects the slightest infiltration of glands, lymphatic vessels or cellular tissue, or the microscope reveals doubtful cellular for-

mations in sections of mucous membrane removed from the vaginal vault, complete extirpation should be abandoned.

2. Cancer of the cervix extending up the cervical canal to a height, the precise limit of which is doubtful, thereby rendering the probability of complete removal of the disease by high supra-vaginal amputation and cautery extremely questionable.

3. Cancer or sarcoma of the body of the uterus. Schröder's method of intra-peritoneal amputation of the *corpus uteri* might be substituted (several operations, with two deaths; no recurrence within two and a half to five years in four cases, or 80 per cent.). The fifth case could not be traced.

4. Perfect freedom of motion of the uterus, so that the uterus can easily be drawn down to the vulva by traction on the cervix, and can be moved in every direction. This condition I consider absolutely indispensable.

5. A capacious vagina, permitting ready exposure of the cervix and vaginal vault throughout, and easy manipulation of ligatures and instruments. Section of the perineum should be admissible for the purpose only when a narrow vagina is the sole obstacle to a successful operation.

6. A sufficiently vigorous condition of the general system, such as absence of other serious organic disease of other organs, as to permit the patient to stand the shock which, as a rule, is very much less than the gravity of the operation would lead one to expect. Cachexia, if present, would denote such progress of the local disease as to contra-indicate the operation. Olshausen had well said, "The safe plan is always complete extirpation."

Dr. Jackson did not think Dr. Munde's array of evidence, clinical or

statistical, rendered invalid the conclusions of last year's paper. Two centuries of human life had been needlessly sacrificed by the operation. The period of prolongation of life, in so-called successful cases, could not, by any array of figures, be made to equal two centuries. The fact that the mortality of the operation had been reduced from 31 per cent. to 25 per cent. had no particular bearing upon the principal question in Dr. Munde's paper. He was strengthened in the position taken one year ago.

Dr. Van de Warker was grieved that Dr. Jackson's paper had been apparently commended at last year's meeting, for the matter had gone abroad that American gynecologists opposed the operation. This was not the case. Carlyle once wrote to Emerson, "Nothing lies like figures, except facts." Very few inferences could be logically drawn from statistics. The question at issue was, How many recover? not How many die? He was an especial advocate of the knife. He thought other methods yielded equally favorable results.—*Louisville Med. News.*

Studies in Internal Endometritis.

At a late meeting of the New York Academy of Medicine (*Med. Record*) Dr. MARY PUTNAM JACOBI read an elaborate paper on the above subject, in which she submitted the following propositions:

1. The essential part of the utero-ovarian system is the endometrium, which may appropriately be called a germinative membrane, because it is the seat of the process of germination of embryonic elements.

2. The utero-ovarian system may be said to have no function.

3. The reproducing tissues generally assume new properties or functions at

certain epochs, and continue their manifestations with the single property of growth until the menopause. So with the ovaries before the menstruation is established, the process of growth is continuous; subsequently the process sustains a series of interruptions, by means of which the changes and processes that occur during their period of activity are deflected into cyclical movements. There are two cycles; the lesser, menstruation; the greater, pregnancy.

4. The homology between these two cycles is complete.

5. The characteristic of the greater cycle is subinvolution of the uterus and its annexæ, namely, the ovaries and the venous plexuses contained in the broad ligaments. The characteristic disease of the lesser cycle is subinvolution of the endometrium after menstruation.

6. In both cycles the physiological process of growth is initiated in the endometrium. Menstruation is initiated in the same tissue, and the cause of failure in this regard is to be sought there. Chronic metritis in the multiparæ or nuliparæ originates in endometritis which implies subinvolution of the endometrium.

7. Parenchymatous diseases of the uterus depend upon diseases of the lining membrane or the membrane covering the surface.

8. Nearly all other utero-ovarian diseases may be summarily traced to diseases of this germinal membrane. Diseases of the ovaries are due, in a large proportion of cases, to original trouble in the endometrium. Even neoplasms begin in a deviation in the processes of growth taking place first in the endometrium. Diseases of the uterine cervix may be primary.

9. Thus, with the exception just named, utero-ovarian affections should

be regarded as unique, the real disease being subinvolution of the germinative membrane with its consequent complications.

10. Utero-ovarian disease is a deviation of the process of growth habitually sustained in the utero-ovarian tissues. The most common is called inflammation, and toward the close of the active period of menstrual life the deviation may be exaggerated and terminate in the development of neoplasms.

11. The ultimate object of all treatment of utero-ovarian disease must be restoration of the integrity of the normal processes occurring in the endometrium, which may be affected either directly or indirectly, the object remaining essentially the same in either instance.

12. Both for the success and safety of local treatment of endometritis, it is essential to take into account rhythmic change, of which it is the seat.—*Det. Lancet.*

DISEASES OF CHILDREN.

Treatment of High Degrees of Paralysis in Children.

RACKWITZ (Strassburg). Jahrb. F. Kinderh (from *Deutsche Ztsch. f. Chir.*, B. XIX., H. 2 and 3), B. XXI., H. 4).

Four cases of spinal paralysis of severe form in children are reported by the author of this paper. Case I.—A girl four years of age. Paralysis of all the extremities came on suddenly, also of the body and tongue, and paresis of the bladder and rectum. After four weeks the paralysis of the arm and tongue passed away, and in two weeks later motion was possible in one of the legs. After this period there were serious secondary disturbances, lordosis of the lumbar vertebræ, contracture of both legs and sub-luxation of the inner

condyles of the femora. The glutei and the muscles of the thighs became atrophic, without a trace of electromuscular excitability, the same condition appertaining also to the lower portions of the muscular structures of the back. The muscles of the upper part of the body and of the shoulders still responded to the electrical current. *Genu valgum* affected both knees; both feet were clubbed, and there was also no electrical response in the muscles of the lower part of the thigh. The treatment consisted in tenotomy of the fascia, of the sartorius, and the tensor vaginæ femoris, and all the muscular fibres which were concerned in the forcible extension of the hip-joint, the patient having first been anesthetized. Next a water-glass extension splint was applied, including also an appliance for the correction of the club-foot. Next an extension bandage was applied to the body. Next tenotomy of the Achilles tendon. Next a corset with shoulderbands, and protective apparatus for the thighs and legs, with shoes attached, abduction and flexion movement at the hip-joint and flexion at the knee-joint. Finally faradization and warm baths daily. Three days after the application of this armor the child began to walk about. Case II.—A girl four years of age, with extensive contracture of the lower extremities, but the muscular structure responded to electricity. The treatment consisted in tenotomy, extension bandages, galvanization of the glutei, and a protective apparatus of a less complicated nature than that which was used in the former case. Case III.—Complete paralysis of the right leg and incomplete of the left followed an acute exanthematous fever. There were also clubbed feet, atrophy of the muscles of the leg and of the extensors of the thigh, and shortening of the right

leg to the extent of six centimeters. Galvanization and warm baths arrested the atrophic process, and after tenotomy and bandaging a protective apparatus was fitted, which enabled the child to walk without crutches. Case IV.—The child was five and a half years old, and had been paralyzed since its second year in both lower extremities. There was atrophy in both legs, flexion and adduction in both thighs, *genu valgum* and *talipes equinus* on both sides. Electrical excitability remained. After suitable preparation tenotomy of the biceps were performed, being preceded by section of the adductor tendons on both sides, in the vicinity of the pubic bone, section of the Achilles tendon, and the application of water-glass bandages. After further treatment with galvanization the child was enabled to stand and walk without a cane. This last case was an illustration of Erb's spastic spinal paralysis. Massage and proper gymnastics were also used as occasion demanded in the treatment of the foregoing cases.—*Arch. of Pediatrics*.

Fœtal Therapeutics.

Dr. SAMUEL WELCH thus writes in the *Medical Press*:

The following cases may, I think, prove interesting to your readers, as no circumstances can be a source of greater misery to the expectant mother than the dread of bearing a still-born infant. I may not, I hope, be thought presumptuous if I express a strong opinion that with a history of syphilis and anæmia, if remedies addressed to the counteraction of these diatheses be steadily persevered in with a very large proportion, if not all, may be carried to a successful pregnancy. Syphilitic disease of the placenta is thoroughly recognized, and there can be no doubt proves destruc-

tive to the offspring, and I think it may fairly be argued that an anæmic condition of this structure may exercise an equally deleterious agency.

Case 1. L. G., aged 27, consulted me. She had been married four years, and had miscarried five times, with pregnancies of from six weeks to four months. On inquiry I found a definite syphilitic history, viz., persistent sore-throat, hair falling out, etc., and on seeing the husband he told me he had suffered from a hard chancre some three years before his marriage. When the patient came under my care she was about two months advanced in pregnancy. I prescribed a pill containing hydr. perchlor. gr. $\frac{1}{12}$, quiniæ disulph. gr. $\frac{1}{2}$, ext. belladonnæ, gr. $\frac{1}{4}$, which was to be taken each night at bedtime. This treatment was continued up to time of her confinement, which took place at seven months, the child, a female one (which was born alive), being very small, and having a very old-man face. About a fortnight after birth the child had a specific rash, and all the signs of congenital syphilis. This was treated by inunction with mercurial ointment and other remedies, under the influence of which it subsided, and the child now is a healthy little thing of seven years. At her next pregnancy I adopted the same treatment, the pill being commenced at three months and continued during the pregnancy, which took place at full time. The child was a boy, born alive, and apparently healthy. At about three weeks a slight rash appeared, which was treated by hyd. c. cret. The lady has since had two further pregnancies, during which she has taken the pill from quickening to delivery, and in each case she has gone to term with a healthy child.

Case 2. A. C. H., aged 32, had been married four years, during which period

She had miscarried seven times, never going beyond four and a half months. She was nearly three months advanced when she came under my care, and had a tertiary rash and syphilitic nodes. I prescribed a mixture of liq. hyd. bichlor., 3 vj.; pot. ioidid., 3 ss.; sp. chlorof., 3 j.; inf. gent. co., ad 5 vj.; one ounce to be taken twice daily. This was persevered with (the amount of iodide of potassium being varied from time to time) till her confinement, which took place at seven months. The child (a syphilitic one) was born alive, but unfortunately died at six weeks, from bronchitis. The woman subsequently left the neighborhood, and so her further history could not be traced.

Case 3. S. W. J., aged 36, has been married five years, during which period she had been prematurely confined four times, at periods of pregnancy varying from four to seven months, the children, which were fine ones, all being born dead. There was no history of syphilis, but the patient was very anæmic, and had all her life suffered from profuse menorrhagia. The case I treated on the lines recommended by the late Dr. McClintock, and prescribed a mixture containing ten drops of the tincture of perchloride of iron, with ten grains of chlorate of potash made up with a simple bitter infusion. The combination had to be varied from time to time, owing to the iron upsetting the digestion, but was persevered in, being taken about twice daily, and at full time the lady was confined with a fine, healthy child. About two years after, the lady again became pregnant, when a like treatment was adopted, and a similar result obtained.

The chief points of interest in the foregoing cases appear to be the following: in the syphilitic cases the immediate advantage obtained by the adop-

tion of a specific treatment and the necessity of continuing it with each succeeding pregnancy, causing a steady diminution in the amount of congenital syphilis in the child. In the anæmic case the administration of the iron would definitely seem to have been the potent factor in producing a living child; and though its exhibition caused considerable dyspeptic manifestations, it may go far to dispel the prejudice existing in the minds of many practitioners against the administration of iron in the pregnant state.

A Fever-Cot For Infants.

DR. WILLIAM PERRY WATSON (*Arch. Pediatrics*).

Recently in a case of high and long continued fever in a young infant, where it was desirable to retain the functions of the stomach for proper nourishment, I devised and used the cot herewith illus-



trated. It consists of rubber tubing securely fastened to sheet-lead. The tubes A and B are respectively the receiving and discharging tubes. The water received by the tube A passes, when the coolest, through the centre of the cot, where the

heat from the little patient's body is the greatest, and is finally discharged from the outside tubes cc through b. The tubing used can be of any size and the lead of any thickness desired, but the lighter each is the more pliable will the cot be in molding it to the body of the patient. I am now using it on an infant seven weeks old, where it is completely wrapped around the body of the patient. The degree of cold applied can be regulated at pleasure by the temperature of the water received by the tube a, and by the amount of clothing on the child or covering over the rubber tubing.

I consider this cot more applicable, less formidable, and more valuable for these young patients than the rubber-coils now so much used in continued high fevers in adults. In critical and selected cases, with a temperature of 106° F., not readily reduced by other means, I carefully give the cold-water douche, and, when the temperature is reduced, place the patient on or in this cot, where the temperature can be kept at any desired point.

OBSTETRICS.

Scarlet Fever in Pregnancy.

Dr. LEALE terminates a paper on this subject with the following conclusions :

1. Scarlet fever may attack the fœtus in utero.
2. A large proportion of children born with scarlet fever recover.
3. Scarlet fever of the new-born child has the same manifestation as in later life.
4. It may attack the woman in pregnancy and also immediately after child-birth.
5. It is exceedingly fatal during pregnancy and parturition.
6. It rarely if ever attacks the parturient woman if she has had it previously.

7. It causes death by coma, exhaustion, or convulsions.
8. Being a self-limited disease, it is best treated by relieving dangerous symptoms, and in accordance with the rules of hygiene. It only exceptionally occurs during the ages that women bear children, therefore the proportion of those liable to contract the disease during pregnancy and child-birth must necessarily be small.
10. Scarlet fever and septicæmia are distinct diseases, being unlike in many respects.—*Med. News.*

Puerperal Eclampsia.

Dr. J. CAMPBELL, M. D. C. M., of Ontario, Canada (*Can. Med. and Surg. Journal*), reports a desperate case of puerperal eclampsia, in which recovery followed the second injection, hyperdermically, of $\frac{1}{4}$ grain of pilocarpine. The doctor describes the salivation and diaphoresis as amounting to a small flood. He recognizes the fact that the treatment is not without danger. J.

Vomiting in Pregnancy.

BERRY HART (Edinburgh), finds in ten cases ten successes in the treatment of this symptom from giving every evening a pill containing: Iridin, 20 cent.; confection of roses, q.s.; followed the next morning by a saline laxative.

M. GUENEAU DE MUSSY finds good effects from the following: Euonymin, .05 to .10 grs. $\frac{3}{4}$ to 1 $\frac{1}{2}$; podophyllin, .02 to .03 grs. $\frac{1}{3}$ to $\frac{1}{2}$; ext. hyoscyami, or ext. belladonnæ, .05 grs. $\frac{3}{4}$. Make one pill—to be taken at bedtime.—*Le Prog. Med.*
—*Med. Med. Jour.*

Disinfectant Injections.

Prof. PARYN teaches that disinfectant injections are important whenever the hand is introduced into the womb.

The Causation of Labor.

Dr. C. E. SHELLY publishes a paper on this subject, in the *London Medical Times*, which thus concludes :

Finally, we may briefly summarize our conclusions thus, dividing the causes of labor into (1) the *primary*, which is the habit of periodic (mensual) uterine contraction ; (2) the *obcidental* (*i. e.*, causes which, being accessory, arise naturally in the course of, and are necessarily evoked by, the progress of the pregnancy itself) ; and (3) the *accidental*, which include *e. g.*, external violence, toxic agents, instrumental interference, emotional effects, and the like.

1. Ovulation begets periodical *congestion* of the generative organs. (*a*)

2. *a* produces rupture of vessels on the uterine surface, giving rise to *effusion of blood*. (*b*)

3. Effused blood, etc., acting as a foreign body, tends to produce reflex *uterine contractions*. (*c*) (This expulsive action is not usually noticeable in ordinary menstruation, for reasons previously given.)

4. *a*, *b*, and *c*, thus induce *habit* (*d*) of periodic contraction and expulsive effort on the part of the uterus, at intervals corresponding to the catamenial periods. (*d*)

5. During pregnancy this *habit* (*d*) continues in force ; but, owing to the character of the fœto-maternal relations, no additional element likely to beget strong reflex expulsive action comes into play until toward the fortieth week. (*e*)

6. Toward the end of the tenth month of gestation there occurs (owing to the pressure consequent on distension) *fatty degeneration of the connections between ovum and uterus*. (*f*)

7. In consequence of *f*, there arises a *further stimulus* to contractile action

by local *irritation* of the uterine nerve-endings. (*g*)

8. Hence, when the tendency to menstrual uterine contraction recurs for the tenth time, it is reinforced by the stimulus *g*, as well as by the other stimuli which are by this time also more or less effective. Whence ensue, at this period, more vigorous contractions, leading to *further separation between ovum and uterus*. (*h*)

9. *h* increases the irritation of *g* ; thus leading again to recurrence of *h*, and so to a constant repetition of this train of phenomena, until the expulsive force thus roused suffices to ensure complete separation of the ovum and its subsequent extrusion.

10. The mere *habit* (even apart from the persistence of its original exciting cause) of recurrent (mensual) uterine activity, as well as the resulting tendency to expulsion of the ovum at the tenth menstrual period of gestation, would become gradually fixed, and so exalted into *physiological laws* by transmission and inheritance through numerous successive generations.

While this view of the subject, thus imperfectly sketched, can hardly fail to increase the interest with which we regard the problem of the causation of labor, it has also a practical value by bringing before us the numerous array of factors engaged in producing that result, and by showing how the normal progress of pregnancy may be jeopardized by the too early or too vigorous incidence of any one or more of them. It claims, also, to afford an explanation of the process in harmony with the great laws of correlation and of continuity whose operations are so widely evidenced throughout the world.—*Med. and Surg. Reporter*.

Failure to Rotate from an Occipito-Posterior to an Occipito-Anterior Position

Occurs in about four per cent. of occipito-posterior cases, according to Dr. UVEDALE WEST (vid. Playfair's System of Midwifery, 3d Am. Edition, p. 71).

In the *Medical News* Dr. H. M. Sherman states that in seventy-seven labors which he has observed this occurred three times. Certainly it is an extraordinary experience to see three cases of this sort in that number of obstetric cases, and the doctor does not say seventy-seven cases of occipito-posterior presentation.

He states also that in each of these cases the plan was successfully carried out of anæsthetizing the patient, passing the hand into the vagina and by conjoined manipulation raising the head out of the pelvic cavity and rotating it into an occipito-anterior position above the superior strait.—*Weekly Med. Review*.

Vomiting in Pregnancy

Is discussed by Dr. W. G. WYLIE in the *N. Y. Med. Record*. He urges specially the advantages of local treatment and particularly the dilating of the cervix. Comparatively little stress is laid upon this mode of treatment in the text-books, he thinks.

He says that, as a rule, the occurrence of morning sickness, even in a moderate degree, is a pretty certain evidence of an unhealthy condition of the cervix, and that for the last two years he has not seen a case of vomiting of pregnancy which did not yield in a few days to local treatment.

He finds that dilatation of the canal for three-fifths of an inch is efficient in relieving vomiting and in softening the hardened condition of the cervix which is so often associated with it. He has devised a modified uterine dilator, bent

nearly at a right angle, by means of which the cervix can be entered and dilated readily, even when it is high and far back in the pelvis. Usually a single dilatation is sufficient to relieve the vomiting. He says that there proves to be less danger of inducing abortion by this method than he had at first supposed, and that in his opinion more cases of abortion and premature birth may be averted by such treatment as this than would be caused by it.—*Ibid*.

[Since the hyperemesis of pregnancy is clearly of reflex origin, it would seem entirely rational to address the treatment largely to the uterus. Accordingly in case of misplacement, relief usually follows reposition. So, too, treatment of erosion of the cervix is often successful in alleviating the vomiting. Yet there is a certain proportion of cases in which all local as well as general measures fail except the termination of the pregnancy. In my own experience, in the severer grades of vomiting, where the life of the patient is in imminent danger, dilatation of the cervix has invariably failed. In a number of cases of this character which I have seen in my own practice or in consultation, the vomiting has continued for five or ten days after complete evacuation of the uterus. The method of Copeman is, therefore, in my judgment, a procedure of moderate value in the vomiting of pregnancy.] J.

Twins with locked Heads.

Twin heads, chin locked, may sometimes be unlocked with the woman in the knee-face position, when not otherwise, so says Professor Parvin.—*Coll. and Clin. Record*.

Fissured Nipple.

Nitrate of lead ointment has been recommended recently as valuable in this painful condition.

DISEASES OF WOMEN.

Recent Progress in the Diagnosis and Treatment of the Diseases of the Female Urethra.

The *Maryland Medical Journal* speaks thus editorially :

Some six years ago, DR. EMMET devised the plan of making a button-hole like opening in the female urethra for the purpose of forming a diagnosis, or for facilitating operative procedures. It has been due to the use of this method of exploration that we now have an exhaustive and practical study of urethral affections. Dr. Emmet does not now hesitate to announce the fact that this method is the only one within our knowledge to-day which fulfils every indication for exploring the female urethra

In the latest edition of his book, Dr. Emmet describes fully this method of operating, and gives a number of illustrative cases showing the results of this plan of diagnosis and treatment. A classification of the diseases of the urethra shows that this organ may be affected with growths and with thickening from inflammation of its mucous and submucous tissues; "the canal may be dilated from before backward, and with more or less prolapse of the mucous membrane along the urethra from the bladder; its lining membrane may be diseased in part or throughout; or fissures may exist at the neck of the bladder." For these conditions we have had no efficient means to aid in forming a diagnosis, until Dr. Emmet devised this button-hole operation.

The importance then of this operation can be fully appreciated in its general bearing upon the diagnosis and treatment of urethral disease. At first thought the distress and reflex disturbances occasioned by growths, fissures, and inflammatory conditions of the

mucous membrane of the urethra may appear to be exaggerated phenomena, but we cannot think Dr. Emmet has overdrawn his estimate of the influence these conditions may exercise upon the female economy. Dr. Emmet is known to be a most careful and painstaking observer. The clinical facts he offers carry with them the weight and force of strong conviction.

Laceration of the female urethra is a condition which, perhaps, few clinical observers have recognized; yet Dr. Emmet informs us that since his attention has been called to the subject, he has found evidence of urethral laceration as common as that of the perinæum, and far more so than the injury through the sphincter ani. The result of this lesion is a too patulous urethral outlet and more or less prolapse of mucous membrane. This prolapse, presenting itself at the outlet of the urethra, projecting from the upper or lower portion of the passage, or occupying the entire circumference of the canal, impedes the escape of urine from the bladder, and, as the obstruction increases, more or less tenesmus is constantly excited, which in time adds to the difficulty. "Ultimately the whole urethral canal becomes displaced, and pressed forward or rolled out by a prolapse of the super-incumbent tissue about the neck of the bladder."

In the recognition of this condition, an important advance has been made in the treatment of urethral troubles.

Urethrocele is another important subject considered by Dr. Emmet. This condition has been frequently attributed to laceration of the perinæum. Dr. Emmet attributes it to an injury of the urethra direct; the laceration of the perinæum preventing a proper support, the condition of the urethra could not improve afterwards, and becomes exag-

gerated in consequence. He believes in the beginning of every case of urethrocele more or less laceration has taken place between the longitudinal fibres of the urethra. This condition is easily remedied by removing the excess of tissue, and by then denuding the sides of the opening in the urethral tract to a sufficient width, so that when the two surfaces are brought together by sutures the urethral canal will be restored to its natural calibre.

In the examination of growths on the uterine wall, it has been claimed that dilatation of the urethra offers superior advantages. As is well known, this operation is not devoid of evil consequences. Permanent incontinence after the operation will occur in a certain number of cases, as a result of lacerations of the urethra. The consequences which follow such a procedure are serious enough to give rise to doubt as to its propriety. Dr. Emmet, having given most careful study to this subject, asserts that the alleged advantages in no degree compensate for the risk, particularly since an artificial opening in the base of the bladder gives equal facilities for exploration, and is attended by no such risk of incontinence.

[The simplicity and usefulness of this button-hole making in the urethra is, perhaps, a little overstrained. It may be easy for one who is accustomed to operating upon the pelvic organs, but most surgeons will find it quite troublesome to make the opening, and more difficult to see much of the interior of the urethra after the opening is made. Most of the diseases of the urethra can be diagnosticated by simpler means. Again, if we except lacerations of the urethra, all other diseases of that part were fully diagnosticated before Dr. Emmet made the button-hole.]

A. J. C. S.

Intra-Uterine Therapeutics.

The question of intra-uterine therapeutics, or the proper drugs to introduce into the cavity of the uterus has been a very much-discussed question. Dr. LOMBE ATTRELL read a paper on the subject, before the last meeting of the British Medical Association, and we give his conclusions :

1. Carbolic acid, in the proportion of one part of spirit to two of the acid, is the safest and most generally useful of all the agents employed.

2. Carbolic acid should always be applied by means of a probe, round the point of which a layer of cotton is rolled, the cotton being carried up to the fundus at least twice on each occasion that the applications are made, which should be on every third or fourth day, till marked improvement takes place.

3. Carbolic acid should never be injected into the uterus, except when combined with iodine, in the form known as iodized phenol.

4. In many cases, iodized phenol may with advantage be applied by means of a probe.

5. In cases in which metrorrhagia or profuse menstruation occurs, depending on an unhealthy condition of the intra-uterine mucous membrane, the cavity being dilated and the uterus enlarged, from half a drachm to a drachm of iodized phenol may be injected with great advantage.

6. In cases in which epithelioma attacks the mucous membrane of the cavity, the injection of iodized phenol promises better results than any other treatment.

7. The success likely to follow the injection of iodized phenol renders the dilatation of the uterus, the use of the curette, and the subsequent application of fuming nitric acid, less frequently

necessary than has been the case hitherto.

8. The injection of iodized phenol requires to be carried out with so much care that it should never be injected except by means of a syringe which will not contain more than one drachm.

9. The use of the fuming nitric acid should be limited, as a rule, to those cases in which dilatation has been practiced, and it should always be applied through a tube, inserted into the cervix uteri for the purpose of protecting the sides of that canal from the action of the acid.

10. The pain produced by the application of any medical agent to the intra-uterine cavity, does not bear any relation to the activity of that agent, but is due to one of two causes—either to hyperæsthesia, or to narrowness of the cervical canal, especially of the os internum.—*Med. and Surg. Reporter.*

The Female Bladder and Urethra. Practical Remarks from the Latest Anatomical Studies.

Dr. BARRY HART (*Anatomy Female Pelvic Organs*), concludes his illustrated sketch of the subject thus :

1. The occurrence of the two shapes of the bladder can only be explained by supposing that the bladder contracts during the expulsion of urine. Hence we have to differentiate three different states of the bladder, viz.: (a) An empty relaxed condition, during which the urine is trickling into it. (b) A contracted condition; and (c) A period of relaxation following the contraction. The bladder thus has a systole, a diastole and a relaxed state.

2. The systole of the bladder explains the intractability of cystitis. The cystic bladder from the irritability of its mucous membrane contracts often,

sometimes every five minutes, and thus the bladder gets no rest.

3. The loose attachment of the bladder to the pubis permits of a great range in its position. Thus in the non-parturient female the empty bladder lies in the pelvis behind the pubis and usually to one side. It is drawn up out of the pelvis into the abdominal cavity during the first and second stages of labor. It is tilted up into the abdomen by the four and one-half months gravid uterus, or by a retro-uterine, extra-uterine gestation. Abdominal palpation may therefore mislead as to the amount of distension of the bladder.

4. The female bladder has no prostate gland, and the entire urethra acts like a sphincter.

5. The urethra is eminently dilatable, so that the index finger can be passed through it without permanent incontinence. This is of great value in diagnosis. But the farther dilatation of the urethra so as to bring about a paralysis of the sphincter for the relief of cystitis is bad practice. It is far better to make an artificial vesico-vagina fistula, as this is readily cured, while such a condition of the urethra is not easily cured.—*Det. Lancet.*

Iodoform in Uterine Colic.

In a paper by Dr. W. A. SELLMAN, read before the Medical and Chirurgical Faculty of Maryland, at the annual meeting 1884, he recommends the use of strong solutions (80 grains to the ounce) of nitrate of silver as the best application in cases of endometritis. He has found it decidedly escharotic and alterative, and he has obtained better results from this than from any other application. A serious objection to its use, however, is the frequent production of severe uterine colic, either

immediately or within an hour after the application.

He has found that the application of iodoform immediately after the nitrate of silver is a complete relief of the intense colic. He generally applies the iodoform by means of a cotton-wrapped applicator. In cases where the contraction of the servical canal is so sudden as to prevent the application in this manner, he uses a medicated uterine suppository or bougie.—*Weekly Medical Review*.

[Would it not be better to prevent the colic by avoiding the treatment which gives rise to it than to cause it and then cure it by iodoform.

Having heard of a man who prevented a bad attack of hydrophobia by getting upon the top of a fence until the mad dog went past, we take a hint and will suggest that patients keep out of the way of an 80 per cent. solution of nitrate of silver, and thereby avoid the need of treatment for uterine colic.]

A. J. C. S.

Leucorrhœa in Little Girls.

BOUCHUT denies (*Paris Prat*). that the leucorrhœa is produced by vaginitis or metritis, but is always the result of vulvitis, and it is the latter that should be treated. He therefore rejects vaginal injections, which are difficult to make in little girls, as well as repugnant to the mothers, and simply treats the vulva. The treatment is both local and general.

Locally.—Extreme cleanliness of the diseased parts, obtained by means of repeated lotions with bran, water of walnut leaves, Goulard's water, etc. 2d. *Modify the diseased surfaces*. For this purpose the means are numerous: corrosive sublimate (10 centigr. to 300) in sitz baths or lotions; carbolic acid, 5 to 1000; coal tar diluted one-half,

and finally cauterization with a solution of nitrate of silver (20 centigr. to 30 grammes) are useful. Between the lotions it is well to apply a pledget of lint saturated with coal tar, or an ointment of red precipitate between the labia. This, kept in place by a pad, protects the labia and surrounding parts from irritation from the pus, which is often very abundant.

Internally, the author recommends for strumous patients cod-liver oil and quinine, and for herpetic patients arsenic. The disease is often rebellious to treatment.—*Chicago Med. Jour. and Ex.*

Semiotic Value of Hydrorrhœa in Cancer of the Uterus.

Hydrorrhœa is a flow from the uterus of a clear limpid slightly citrin aspect, inodorous and rich in albumen.

It results from transudation of serum, favored by two factors; the congestion of the vessels of the uterus, and the infiltration of the uterine tissue by the cancerous neoplasm.

The first acts by the accumulation of blood, which distends the vessels, and by the production of carbonic acid, which excites the contraction of the uterine tissues.

The second acts by the anatomical modification of the blood vessels (cancerous degenerescence) which makes the walls of the latter more permeable; and the neoplastic element itself causes a reflex action of the uterine fibres.

The two factors, by their double action, converge to the same end, that is, favor the transudation of sanguinous serum, by the anatomical modification of the vessels, and by exciting an active tonicity of the uterine fibres, they force the flow of the serum outward under the form of hydrorrhœa.

Hydrorrhœa is the premonitory symptom of cancer of the uterus; it is the earliest sign of a cancerous invasion; it precedes all other symptoms of cancer of the body of the uterus. When pains and hæmorrhages supervene, it shows that the cancerous invasion has reached the cervix, which does not occur until the hydrorrhœa has given place to cancerous ichor.

Hydrorrhœa is preceded by pain and hæmorrhages when the cervix is first attacked, it is only the invasion of the body of the uterus which brings on hydrorrhœa.

It is also preceded by hæmorrhage in uterine fibroma, which undergo cancerous degenerescence; it is the cancerous neoformation which brings on hydrorrhœa, which can also be confounded with the watery escape in pregnancy, either symptomatic or idiopathic. The differential points are: Its mode of production, its perfect fluidity, its limpidity, and richness in albumen; and, above all, the presence of cancerous cells in the liquid.

The prognosis of hydrorrhœa is very grave, for it is the announcement of a cancer in the uterine body. By its long duration and abundant production it carries off a large quantity of albumen, causing rapid exhaustion.

Treatment must be directed in two directions: 1. To combat the flow by astringents. 2. To improve the general health by arsenic, tonics, and good diet.—*St. Louis Medical and Surgical Journal*.

Pruritus Vulvæ.

Prof. DA COSTA says that pruritus vulvæ is a symptom of diabetes mellitus often occurring and not enough recognized. In this disease defective nutrition causes neuralgia, which fact is per-

haps not generally known. Pulmonary disease often occurs from the same cause, but the death rate from consumption in this disease is not so large in America as in Germany, where it reaches thirty to thirty-five per cent.—*Col. and Clin. Record*.

Alcoholic Injections in Uterine Hæmorrhage.

Dr. HAPGOOD (*British Medical Journal*) reports a severe case of uterine hæmorrhage where the only remedy at hand was a bottle of whisky. He promptly soaked a napkin in the whisky, and introduced it into the uterine cavity, with the result of stopping the hæmorrhage. Encouraged by his success, he states, he has now used injections of alcohol in several similar cases, and with such good results that he recommends this treatment to the consideration of the profession.—*N. Y. Med. Jour.*

The Treatment of Ruptured Perineum by Iodoform.

The *London Med. Times* says that a recent number of the *Zeitschrift für Geburtshilfe und Gynäkologie* contains an article by Dr. C. BEHM, on the above subject. He points out that in the region of the vagina and perineum the efficient application of the ordinary kinds of antiseptic dressing is very difficult if not impracticable, on account of the unavoidable fouling of them by urine and fæces. Iodoform has the property of closely adhering to wound surfaces, over which it forms a felt-like covering, difficult of detachment. It is, therefore, peculiarly suited to the needs of the ano-vulvar region. The method which Dr. Behm recommends, is the painting the surface of the wound with "iodoform-collodion" (iodoform one part, flexible collodion

ten parts). He believes that the protective film thus formed does not act as a foreign body, and prevent primary union, but that, on the contrary, by checking secretion, it favors this mode of healing.—*Ibid.*

In Freshly Ruptured Perineum

Dr. I. H. CARSTENS proposes a different method from that usually adopted in treating a case. He either on account of the tumefaction waits with the sewing from twenty-four to thirty-six hours—or if operating, immediately to use lead plates with perforated shot so that the suture may be tightened when needed.—*Am. Journal of Obstetrics.*

Removal of both Ovaries to Prevent Loss of Vision.

Dr. PRIESTLEY SMITH, in the *Ophthalmic Review*, details a most interesting case of a young woman suffering from blindness, and relieved by removal of the ovaries. The patient was a married woman, aged 24. She had suddenly and completely lost the sight of the left eye after a fainting fit, consequent upon ovarian or uterine disease, as it was preceded by pain in the pelvic region. Subsequent attacks of the same nature affected the right eye temporarily, its field of vision becoming permanently lessened. The retinal arteries of the left eye were shrunken and the disc pale.

As complete blindness was imminent, it was resolved to remove the ovaries, which were diagnosed to be in a state of chronic inflammation. Both ovaries and Fallopian tubes were removed, being found diseased. After the operation the fainting attacks ceased and the field of vision of the right eye was restored. Smith explains the pathological condition to be reflex disturbance

of the cerebral and retinal circulation through cardiac inhibition, great reduction and slowing of the current of blood in the retinal artery, and thrombosis.

A Rare Form of Vulvar Disease.

Dr. MIDDLETON MICHEL has recorded, in the *American Journal of the Medical Sciences* for April, a very rare form of hypertrophic growth, consisting of a number of elongated prong-like growths, some an inch in length, of almost scirrhus hardness, springing from the carunculæ myrtiformes and fourchette, which caused difficulty in urination. They were removed by the knife without pain or hæmorrhage, and two years later they had shown no signs of recurrence.—*Med. Herald.*

Membranous Dysmenorrhœa.

Prof. DACOSTA has found membranous enteritis to very often occur associated with hysteria in women—which is cause, and which is effect, he is not certain. Membranous dysmenorrhœa is also a frequent concomitant. One lady patient had the curious disturbance of vision that she could read only every fourth line. One boy had been long punished by his parent for bad temper, the cause of which was his disease, which yielded under treatment. The diagnosis depends on finding the membrane in the stools; aphasia, tetanus, vertigo, loss of memory, and other nervous symptoms occur.

The Etiology of Some Cases of Septicæmia

Accompanying lacerated cervix is the subject of an article, by Dr. WATKINS, of Troy, N. Y., in which he gives the following summary of advice:

I. Until the cervix is fully dilated, the presenting part must be kept back

and the cervix supported to prevent its laceration by the presenting part of the after coming shoulders.

2. Hot water injections will immediately, after delivery, make laceration of cervix and vagina patent.

3. In every case of suspected cervical laceration a careful search should be made with the uterine sound for supra-vaginal cervical laceration.

4. Large doses of quinine, twenty or so minutes prior to the uterine injection, will prevent chill, and probably also uterine colic.

5. A supra-vaginal laceration of the cervix should be treated by the armed probe and irrigation.

6. Examination within the first few days after labor would probably show a fair percentage of periuterine hematameter from laceration.—*Amer. Jour. Obs.*

DISEASES OF CHILDREN.

Some of the Common Disorders of Infancy and Early Childhood.

Dr. G. A. HILL, *Med. and Surg. Reporter*: Vomiting is another trouble frequently met with even in children otherwise quite healthy. However, as a recurrent symptom in more severe affections, it should occupy our serious attention. It is well known as a precursor of that terrible disease, tubercular meningitis, as also of some exanthems, as scarlatina, etc. When the stomach is overloaded, or has been irritated by undigested food, its evacuation is rather to be considered a fortunate propensity than as a sign of disease; but if this irritability continues, and the child shows signs of exhaustion or inanition, it becomes necessary to interpose medical aid. His food, if the child be artificially fed, must be changed; this

change is frequently productive of good results, even when the diet adopted has no special superiority over that laid aside. The little stomach seems grateful for the change, and at once ceases its revolts. For infants a mixture, of equal parts of milk, lime water, and arrow-root water sweetened with a little milk sugar, will scarcely ever irritate the most delicate stomach.

The various diastatic preparations, as the extracts of malt, if added in small quantities to the milk will often be found to exercise a happy effect in facilitating the digestive process. Baby foods without number have been promulgated, some of which possess real merit. My experience with Mellin's and Horlick's infant foods has been most favorable to their strong recommendation. If the digestive powers are much impaired from debility or other cause, pepsin should be given with each feeding.

For excessive irritability and vomiting between meals it is often necessary to resort to medicines; the following combination has succeeded so constantly in my hands that I offer it without apology:

℞. Spt. chloroformi, ʒj., creosoti (ligni), ℥ij., vini ipecac, ℥v., aquæ anisi, q. s. ad. f. ʒij. M. Sig.—A teaspoonful for a child a year old. Closely associated with the above, and depending upon similar causative influences is *colic*, which, though not difficult, generally, to relieve, should not be treated lightly, since from the pain, loss of rest, and other strains upon the nervous system convulsions may supervene.

Usually, to one accustomed to note closely the actions of his little patients, there should be no difficulty in determining in this instance the cause of the distress. In simple, spasmodic colic, the contracted brow and screwed-up

mouth, the loud, angry cry, and the hard, nodulated abdomen, are, during the paroxysm, the characteristic symptoms; there is also, I think, a slight elevation of temperature. Sometimes there is diarrhœa, but generally the bowels are costive, with a reversed peristalsis, causing vomiting of bilious matter.

Of course, the first thing is to relieve the pain by anodynes, if it seems violent, for which a mixture in equal parts of those time-honored remedies, elixir paregoric and Hoffman's anodyne, can scarcely be improved upon. After this, a mild cathartic is clearly indicated, or what may be better, if vomiting has commenced, an enema of castor oil. The old plan of giving emetics in such cases, while probably effectual in relieving intestinal spasm, I would consider too prostrating, and for this reason do not prescribe them. When there is intestinal dyspepsia, as indicated by milk-curd or other undissolved matter on the napkin, some of the modern digestives, with or without the so-called carminatives, are proper; a little tincture of asafœtida, with the well-known elixir lactopeptine, are excellent for this purpose, especially in very young babies. Attention should likewise be had to the constitution, usually found faulty in these cases, by inaugurating better food, better hygiene, and tonics.

I beg to speak briefly of one other difficulty, which, though not frequently dangerous, is very annoying to both infant and parent, and occasionally so distressing as to seriously compromise the health of the little victim. I allude to *excoriations*. Improper dressing, want of strict cleanliness, diarrhœic or acid stools, excessive delicacy of the skin, and unwholesome food, are the common causes of this affection. By this constant peripheral irritation the child becomes extremely nervous, starting and

crying in his sleep, restless and petulant, and in other ways showing a highly perturbed nervous state. Should these things continue, local nutrition may become so modified as to cause the abrasions to take on unhealthy action, and may even degenerate into sores, having no tendency to heal spontaneously. By removing probable causes, giving alkaline laxatives or correctives, improving nutrition, and the use of appropriate local measures, there is usually no difficulty in curing the trouble. Locally I have found equal parts of rice flour and subnitrate of bismuth, with a little morphia, to answer well. Oleate of zinc may take the place of the bismuth. Soap and water should also have an honored place among the best of local remedies.

Lancing the Gums in Infants.

A recent paper on the subject of lancing the gums, read before the Medical Society of London, by Mr. EDWARD OWEN, brought out a very strong sentiment in favor of this operation, and showed that it has by no means lost its hold upon the favor of English physicians or become obsolete among them. One commentator—an F. R. C. S.—writes: "I should have thought no man could be in practice a month without having finally persuaded himself of the value of the gum lancet. Cannot every practitioner look back on countless cases of convulsions—perhaps of hours' duration—cut short instantly; of intense reflex constitutional disturbance, high temperature and general febrile condition, great restlessness, great evident pain and distress, perhaps threatened convulsions, at once subsiding on lancing the gums?" The same writer says that the insufficient use of the lancet will often explain the failure to ob-

tain relief from this measure, the incision failing to completely relieve the tension and free the tooth. He further suggests that dentition is not always a simple physiological process as in children "with the large head" who especially need help, convulsions often accompanying the process in them. Likewise the reflex irritation of the brain which originates in the eruption of a tooth may determine the occurrence of that insidious disease, infantile paralysis. To him "it is incredible if other men's experiences be like mine, that in looking back upon their work they do not accord their chief and most obvious triumphs to the use of the lancet and the gum lancet."

A more conservative view maintained by another writer is that dentition is a purely physiological process "accompanied, it may be, with an abnormal excitability of the nerve centres, which renders the system more susceptible to accidental causes of disease, such as cold, shock, improper feeding;" that the gum lancet may be needful, though rarely; that inflammation of the gum is not a usual association in these cases; that tension of the gum is negatived by the absence of gaping after incision and by the readiness with which the incision heals, and that favorable results, immediate relief of diarrhœa, bronchitis and convulsions—is not of such constant occurrence that it may not be regarded as a *post hoc*, etc.

That the practice of lancing the gums has fallen very much into desuetude is unquestionable. Whether such a fact is capable of justification may well be questioned. In itself a very simple operation and entirely devoid of danger, if there are good grounds for believing that it is even exceptionally beneficial, we are unwise if we withhold from our little patients, in suitable cases, the re-

lief which it may be expected to confer. Now there are the very best authorities, old and recent, who maintain its utility. In the discussion above referred to, for instance, such well known physicians as Drs. Clement Godson, Braxton Hicks, Parramore, Hamilton Cartwright, C. J. Hare, Webb, Duncan, Ewart and Drew, testified strongly in its favor. Such testimony could, we believe, among our readers, be multiplied many fold. As Dr. Hicks remarked, the nervous economy of the child is exceedingly sensitive, and reflex disturbance may be readily set up by the eruption of the teeth. May it not be that most of the opposition to the practice results less from conviction or proof of its inutility than from that tendency to therapeutic nihilism now so prevalent, or perhaps to an unwillingness to resort to instrumental methods, especially cutting operations common among a large class of physicians. We should be glad to elicit from our readers an expression of opinion on the subject, and especially from those experienced country physicians who have practiced in so many hundred if not thousands of cases.—*Med. Med. Journal.*

Incontinence of Urine in Children.

Of medicines which diminish irritability, belladonna takes the first place, but it is important to be aware that this remedy, to be effectual, must be given in full doses. Children have a very remarkable tolerance for belladonna, and will often take it in surprising quantities before any of the physiological effects of the drug can be produced. In obstinate cases of enuresis the medicine should be pushed so as to produce dilatation of the pupils, with slight dryness of the throat. In children of four or five years of age, it is best to begin

with twenty-five or thirty drops of the tincture of belladonna, given three times in the day, and to increase the dose by five drops every second or third day, of course watching the effect. Ergot is another remedy which is often very successful. For a child of the same age, twenty drops of the fluid extract may be given several times in the day.

Bromide of potassium, benzoic acid (dose, five to ten grains) and benzoate of ammonia, digitalis, borax, cantharides, camphor, and chloral have all been recommended as specific in this complaint. Sometimes a combination of several drugs seems to be more effectual than one given alone. I have lately cured a little girl, aged four years, who had resisted all other treatment, with the following draught given three times in the day: $\mathcal{R}$. Tinct. belladon., $\mathfrak{m}$ i.; potas. brom., gr. x.; infus. digitalis, $\mathfrak{z}$ ii.; aquam ad., $\mathfrak{z}$ ss. M. Ft. haustus.

When the incontinence continues in the day as well as at night, strychnia should be combined with the sedative, so as to give tone to the feeble sphincter. In these cases, too, cauterization of the neck of the bladder, with a strong solution of the nitrate of silver ($\mathfrak{D}$ i.— $\mathfrak{z}$ i. to the ounce of water), has been found successful.—*Eustace Smith's Work on Disease in Children.*—*Med. World.*

Dysentery of Children—Ergot.

Twenty-one cases of dysentery in children, reported by Dr. G. L. MAGRUDER, of Washington, were treated with fluid extract of ergot, five to twenty drops four or five times a day. Almost every case immediately responded to treatment, and was either entirely relieved or much improved.—*Va. Med. Monthly.*

OBSTETRICS.

A Case of Mural Pregnancy.

Dr. W. H. Byford read a paper before the Chicago Gynecological Society.

The history of the case was obscure. The patient, twenty-eight years old, married seven years, had one child, six years old. She supposed she became pregnant, for the second time, in February, 1883. In April, she became fatigued and had hemorrhages, which continued until May 9—about four weeks.

October 14, a discharge of yellow fluid, about one gallon in quantity, occurred. A putrescent, sero-sanguineous discharge followed, continuing three months.

January, 1884, a large brownish mass, with very fetid odor, was expelled. After this event menstruation occurred until July.

In May, she was quite large, and had bearing-down pains. She entered the hospital October 6, 1884. She was tapped October 18, and about four quarts of thick, tenacious fluid, resembling the fluid of an ovarian cyst, were removed. This fluid coagulated on the addition of nitric acid and on boiling. Assisted by Dr. R. Pilley, a microscopical examination was made, with negative results. The "Drysedale" cell was not found. Laparotomy was performed, and a fœtus with placenta was removed without hemorrhage or difficulty. In order to secure perfect drainage, it was considered best to remove the uterus. The operation was performed on October 30. The patient did not react, but died within twenty-four hours. Prior to the operation, the patient was extremely reduced by her protracted sufferings. Dr. Byford, in a similar case, at the present time, would elect the vaginal operation. The specimens

removed from the woman were exhibited as supporting the diagnosis of mural pregnancy.

This was the second case of mural pregnancy that had come under the reader's observation within a period of five years. The first case was reported to the Chicago Gynecological Society some time ago. The patient was in labor and moribund when Dr. Byford saw her. She had been in labor until exhausted. There was no difficulty in making a diagnosis. The head was low down in the pelvis, almost on the perineum. The *os uteri* was well nigh inaccessible behind and above the symphysis. The body of the uterus, somewhat enlarged, could be felt in the lower and anterior part of the abdomen, attached to the tumor containing the fœtus. The fœtus could be felt through the abdominal walls, surrounded by a thick involutum, apparently as thick as the uterine walls. Fœtal extremities could be distinguished. When dissected, the sac, in which the fœtus was contained, was found to consist of a thick layer of muscular fibres. These fibres were directly continuous with those of the uterus. The tubes and ovaries lay on either side of the lower portion of the sac. The fecundated ovum had made its way down the tube, become lodged in a diverticulum in the uterine wall, and was gradually extended into the cavity of the abdomen. The fœtus was thus developed within the uterus, though not within the uterine cavity. The resemblance to normal pregnancy is great in the presentation and position of the fœtus, deep down in the pelvic cavity, behind the vagina. The head, in this case, was fixed by the concentric contraction of the uterine fibres, by which it was surrounded, and could be easily outlined as it lay there covered by the posterior vaginal wall.

The specimen presented is much less perfect than the one described, because of the numerous effects wrought upon it during the great length of time it remained in the maternal body, and the mutilation consequent upon enucleation.

The treatment of these cases ought to be considered apart from that of extra-uterine pregnancy at term. It is always a matter for special consideration in connection with each case as it presents itself, whether or no the removal of the fœtus at term in extra-uterine gestation should be attempted. The dangers of laparotomy are greatly increased by the inability to remove the placenta. The surface to which it is attached has no contractile power, so that the divided vessels are left patulous. If hemorrhage does not immediately prove fatal, the blood is a source of sepsis that must almost certainly destroy the patient. Laparotomy would more likely prove successful if performed some days after the death of the child. In these cases of ectopic or interstitial uterine pregnancy, the fœtus may be easily removed through the vagina. An incision made through the posterior vaginal wall would completely uncover the presenting part and enable one to apply the forceps, or attack it with the perforator and crotchet, as in ordinary labor. After the removal of the fœtus the placenta should be allowed to separate spontaneously.

Since writing this report, Dr. Byford has seen a case, reported in the *Annales de Gynecologie*, July, 1884, occurring in the practice of Dr. Matheson, of England, illustrative of the execution of this plan. The case was reported to the London Obstetrical Society, under the title, "Extra-uterine Pregnancy, the Extraction of a living Fœtus through the Vagina." The child was slightly asphyxiated, but survived. A sponge,

saturated with perchloride of iron, was introduced into the sac after removal of the placenta. The mother recovered. It would seem that the author did not suspect his case to be one of interstitial pregnancy. During the discussion that followed only one of those present expressed the opinion that it was of that variety. Mr. Griffith thought it was either interstitial pregnancy or one in which the fœtus was developed in one portion of a double uterus.

DISCUSSION.

Dr. Edward Warren Sawyer thought that interstitial pregnancy meant the development of the ovum in the uterine portion of one of the tubes. In Dr. Byford's case the uterine portion of the tubes was not involved. It reminded him of a case he had seen near Denver. In this case a secondary uterus, with muscular walls, had been developed, but as the tubes were not involved, he did not feel justified in designating the case one of interstitial pregnancy.

Dr. D. T. Nelson said, with reference to the treatment of the placenta, that Dr. Byford's advice was that usually recommended in the text books. The placenta should be left alone in those cases in which the walls of the secondary uterus were not muscular. He had seen a case in the museum of the Chicago Medical College in which no muscular fibre could be detected in the walls. When the walls of the adventitious uterus were muscular it was questionable whether or no the placenta should be left alone. If the placenta is removed there is danger of hæmorrhage; if the placenta remains there is danger of sepsis. While there was reason to suppose that contractions of the adventitious uterus would check hæmorrhage, he thought the placenta should be removed. He had no experience in these cases.

Dr. E. C. Dudley replied to Dr. Nelson. Women, in cases of extra-uterine pregnancy, in which the placenta has been allowed to remain, do not die of sepsis. He had seen two or three cases in which the sac had been united to the abdominal incision. Whenever evidence of sepsis occurred the sac was washed out, and the temperature immediately fell to the normal. The placenta under these circumstances is spontaneously eliminated in about three weeks.

It requires phenomenal powers of diagnosis to tell in the concrete case whether or no the sac had sufficient muscular fibres to prevent hæmorrhage. The placenta should be permitted to remain within the sac.

Dr. J. H. Etheridge thought that if, on microscopical examination, it was found that the muscular fibres of the normal uterus were continuous with those of the adventitious uterus, the case was one of mural pregnancy. In cases of abdominal pregnancy, there was a line of demarcation between the normal and adventitious uterus.

Dr. A. Reeves Jackson thought the members of the society were greatly indebted to Prof. Byford for the presentation of such an interesting specimen. He thought, however, with Dr. Sawyer, that the results of the anatomical investigation did not support the author's diagnosis. The uterine portions of the tubes were not involved. So valuable a specimen deserved very close microscopical and macroscopical examination. It ought to be referred to a competent pathological anatomist.

Dr. John Bartlett thought the ovum had not passed through the tube, but had been developed in the broad ligament beneath the peritoneum, and had, in this manner, derived muscular fibres from the uterus.

Dr. W. W. Jaggard referred to the

fact that next to ovarian pregnancy, interstitial pregnancy was of most infrequent occurrence. Up to the present time about thirty cases, in regard to which the diagnosis was positive, have been reported. Interstitial or mural pregnancy included other sites of development than the uterine portions of the tubes. Dr. Gilbert's case, reported in the *Boston Medical and Surgical Journal*, March 3, 1877, and alluded to by Prof. Lusk in his treatise on midwifery, was a case in point. The ovum in this case was developed in what seemed to be a bifurcation of the fallopian tube. In Dr. Byford's case, the tubo-uterine orifices were not involved. The sac was extrinsic to the uterine walls. It was probably a case of abdominal pregnancy, in which the ovum became attached to the posterior uterine wall, and derived muscular fibres from its locality. The fact that a continuity of muscular fibres from the normal uterus to the adventitious uterus might be ascertained upon microscopical examination, would prove nothing as to the nature of the pregnancy. Dr. Byford's case resembled that of Jauverin, in which the ovum lodged on the posterior uterine wall, and developed in this situation, involving the posterior wall in its sac. The specimen was worthy of more exact investigation, and should be placed in the hands of a competent pathological anatomist.

Dr. Sawyer said that abdominal pregnancy with location of ovum on posterior uterine wall was not at all improbable. He then referred to Bischoff's and Leopold's observations and experiments with relation to the "external wandering over of the egg." Beigel had ridiculed this idea. It was like a blind man introduced into a large, empty room, with a thread in his hand seeking to find and thread the eye of a

needle located in some indefinite quarter of the room. Notwithstanding the sarcasm, the fact of the external wandering over of the egg was a matter of positive knowledge. The egg may pass from one ovary to the opposite fallopian tube through the abdominal cavity. He thought the specimen exhibited was one of abdominal pregnancy.

Dr. Dudley thought the fact of the external wandering over of the egg was not disputed at the present time. Playfair in his treatise on midwifery gave a clear exposition of the subject.

Dr. Charles Warrington Earle said that the fact of external wandering over of the egg was fully recognized twelve years ago.

Dr. Sawyer said the ovum in abdominal pregnancy might be attached to the posterior wall of the uterus, the mesentery, under surface of the liver, or to other viscera.

Dr. Nelson made the remark that in both of the cases cited by Dr. Byford, *decidua* had been cast off by the *uterus*.

Dr. Jackson said that Frankel was of the opinion that the formation and extension of a *decidua* was a constant occurrence in extra-uterine pregnancy. It was pathognomonic of the condition.

Dr. W. H. Byford was not surprised that certain members did not agree with him in his diagnosis. He thought that in the first case the fecundated ovum passed through the tube, but had found some diverticulum in the uterine cavity, and had passed into the posterior wall, and developed in this region, pushing the wall before it. Some of the reasons for this position were as follows :

The muscular elements of the sac were directly continuous with the uterine muscle. He did not believe that such a muscular sac could develop adventitiously in the abdominal cavity. He had seen cases of abdominal preg-

nancy with no muscular fibres in the sac. The head presentation, down deep in the pelvic cavity, in the direction of the resultant of the forces developed by uterine contractions, supported his view of the case.

It is not necessary for the production of mural pregnancy that the tubes be involved. He thought there was much in the remarks of Dr. Nelson and Dr. Dudley. In cases in which there was sufficient contractility, it was best to remove the placenta. Even under these circumstances it was not absolutely necessary. There was no danger in allowing the placenta to remain.

Finally, he was very positively of the belief that the two cases referred to in his paper were examples of mural pregnancy. The peritoneum was a boundary line between mural and abdominal or peritoneal pregnancies.

Is it Necessary to Permit Women to Suffer During the First Stages of Labor?

In a communication in the November, 1884, issue of the *Obstetric Gazette*, Dr. WM. B. ATKINSON, writes as follows: I regard it as being highly reprehensible to allow any woman to suffer, especially, as is so often the case, when from some vice in the system she will commence hours, even days, prior to delivery, with pains which are utterly useless and greatly exhausting. In the early years of my practice I employed morphia, but now, since 1869, I invariably give chloral, and I have never failed to see the happiest results. When called to a case and I find the woman suffering with pain at intervals, little or no dilatation of the os uteri, I immediately administer a positive dose of chloral, from ten to twenty grains, with orders to repeat in an hour or two if required. When these are false pains

they are speedily dissipated, the woman has a refreshing sleep, and may go on for a number of days in much comfort until true labor sets in. Or she awakes refreshed, invigorated, and, in many instances, on my return, I have found the os uteri fully dilated and the labor rapidly progressing to a favorable termination.—*Coll. and Clin. Record.*

A New Method of Diagnosing Pregnancy in the Early Months.

The sign on which Professor HEGAR comments (*Annales de Gynecologie*, September, 1884), is a peculiar softness, a certain subtileness, and a thinning of the lower segment of the uterus—*i. e.*, of the part of the uterus which is immediately above the insertion of the sacral uterine ligaments. This condition can be easily verified, not only when the uterus is resistant, as is usual, but still more so when it is elastic and soft. Even in these cases it is possible, by depressing the lower part of the uterus, to distinguish it from the superior portions, and from the rigid cervix. The softness of this part is such that one might imagine that the cervix was simply in contact with a pelvic or abdominal tumor. We do not know what pathological condition of the womb can present such symptoms. The cause of this remarkable sign exists in the fact that the inferior segment of the uterus becomes during pregnancy the finest part, the softest and the most elastic. It thence results that, in practising the rectal touch with abdominal palpation, it is possible to feel between the fingers this portion of the uterus, with the characters it presents.—*Med. and Surg. Reporter.*

The Influence of Age on Primiparous Labor,

As viewed by KLEINWACHTER is cited in the *Practitioner* from *Zeitschrift f.*

Geburt. u. Gynak. His figures are derived from the records of his clinic at Innsbruck. He divides into three groups the 920 cases of primiparæ which have been attended there. In the period from 16 to 19 years of age there were 111 cases; 21 to 29 years 694 cases; 30 to 41 years, 115 cases. He names these groups respectively the young, the middle-aged and the old. He concludes,

1. That accidental complications which have nothing to do with pregnancy occur less often in the young group, most frequently in the old;

2. That ailments attributable to pregnancy are observed most frequently in the old and next most frequently in the young.

3. That hemorrhages in the course of pregnancy occur most frequently in the young and least frequently in the old.

4. That the duration of labor is most frequently abnormally protracted in the old, and next in the young.

5. That inefficient pains abnormally protracting labor are least frequently met with during the period of middle-age, most frequently in the old.

6. That, therefore, forceps must be used most frequently among the old, most seldom among the middle-aged.

7. That the lengthening of the labor of primiparæ with the increase of age occurs chiefly in the first stage; the second stage is scarcely affected by differences of age; the third stage is not at all affected.

8. That the percentage of mortality after forceps operations on primiparæ rises parallel with the increase in age.

9. That the older the primipara the greater is the danger of perineal laceration.

10. That the older the primipara the more likely a post-partum hemorrhage, although the frequency of hemorrhage

is by no means so great as hitherto supposed.

11. That the disposition to affections of the kidneys increases with age in primiparæ.

12. That the frequency of edema without kidney disease also increases with the age

13. That the older the primipara the less is the danger of mastitis and the less probability of her being able to suckle her infant.

14. That the old most frequently and the middle-aged least frequently sicken and die of puerperal fever or have puerperal mania.

15. That the morbidity and mortality per cent. is highest in the old, and lowest in the middle-aged.

16. That spontaneous premature labor occurs very frequently in old primiparæ and least often in the middle-aged.

17. That the frequency of abnormal positions of the fetus increases with the age of the primiparæ.

18. That the older the primipara is, the more likely she is to bear a boy, except those from 20 to 21 years of age, who bear more girls than boys.

19. That analogous to the discovery made by Hecker and confirmed by Wernich, viz., that first-born children are heavier and longer the older the mothers are, is the fact that the umbilical cord of the first-born of old mothers falls off the earliest, and that of the first-born of the youngest mothers the latest.

20. That the liability to twin pregnancy in primiparæ increases with the age.

21. That with increase of age in primiparæ the frequency of bearing deformed children diminishes.

22. That the mortality per cent. of first-born children increases with the

mother's age; among the oldest primiparæ the fetal mortality reaches a not inconsiderable height.—*Weekly Med. Review*.

The Changes of Sensibility of the Skin of the Abdomen During Pregnancy

Have lately been studied by R. Teuffel, who reported his observations in *Zeitschrift f. Biologie*, Bd. xviii., p. 247. His results correspond with those of Czermak, who had previously ascertained that the sensibility as determined by the esthesiometer is sensibly diminished and that in proportion to the degree of distension.

While most experimenters agree as to the results attained in the examination of women recently confined, the contrary is true as to pregnant women. The difference is explained by the varying elasticity of the skin in different individuals, so that under the influence of uterine enlargement the distension of the skin is not produced equally in all. So at the site of the striæ the diminution of sensibility is much more marked than in other regions.—*Weekly Med. Review*.

Puerperal Poisoning.

Dr. ROBERT BARNES, of London, summarises the forms of puerperal poisoning under three heads:

1. *Endosepsis*, or self-empoisonment from loss of balance between absorption of waste and its excretion.

2. *Autosepsis*, or self-empoisonment from absorption of decomposing material in the uterus. (This embodies septicæmia.)

3. *Exosepsis*, or empoisonment from extraneous sources.

Endosepsis may occur *per se*, but *autosepsis* also implies *endosepsis*, and *exosepsis* is a compound of all three condi-

tions. *Endosepsis* is not considered infectious; *autosepsis* is. The discharges from one puerperal woman which are capable of poisoning herself, may poison another. *Exosepsis* is doubly infectious; it is infectious as *autosepsis*, and as a zymotic poison.—*Med. Record*.

Pruritus Vulvæ.

R. Sodii hyposulphitis, $\bar{\text{z}}$ iv., glycerini, $\bar{\text{z}}$ ij, aquæ destilat; ad. $\bar{\text{z}}$ vj. M. Sig.—As lotion.—Fox. This simple combination has proved very effective in that troublesome and very annoying malady, pruritus vulvæ, and also in tinea versicolor.—*N. E. Med. Monthly*.

The Use of Cold in Midwifery.

DR. GROGNOT (*Bull. gen. de therap.*) speaks highly of the emmenagogue properties of external applications of cold. Being convinced that the uterine contractions induced by ergot, faradization, and massage were transitory and inefficient, he was led to try the effect of cold, which he regards as superior to either of the other agents. He summarizes the advantages of cold as follows: 1. If cold is applied during labor, the contractions become stronger. 2. There is no danger either to the mother or to the child. 3. The agent is always at hand, and requires no instruments for its application. 4. Cold can be used in every stage of labor, for the expulsion of the placenta as well as for that of the fœtus.—*N. Y. Med. Journal*

Glycerine for Indigestion

With duodenal catarrh, etc., and in infants which have been fed shortly after birth, is advised by *The Medical Index*.

DISEASES OF WOMEN.

Absence of Vagina, Uterus, and Ovaries in an Apparently Well-Built Woman.

In the *New York Med. Jour.* Dr. HENRY J. GARRIGUES reports an abstract of this case. He publishes the case because it was usually said that there should be some signs pointing to such a condition in the appearance of the patient; especially that there should be a weakly, imperfect general development, absence of the mammæ, &c., but in this case there were absolutely no such signs. Even on examining the external genital organs one would have supposed the patient to be quite normally developed; it was only on searching for the vagina that he discovered the condition described.

The case was also interesting as showing the manner of natural development of the vagina and uterus. One point which had puzzled him a little was the history of the monthly molimen, for he had been unable to find any trace of ovaries. The patient, however, had some headache and general malaise almost constantly, and we could easily imagine that these symptoms might be increased a little every month.

The question might arise whether he was warranted in telling the patient that nothing could be done for her. Of course, if a uterus had been found, the treatment would have been to make an artificial vagina; but would it be proper to make an artificial vagina for the sole purpose of coition? He thought not; the woman would be exposed to much danger thereby. The operation itself would be dangerous, and the act of copulation in this artificial canal would expose her to constant danger.—*Med. & Surg. Reporter.*

[In this case the woman was, no

doubt, better built than her clinical history. A woman with all the outward characteristics of her sex, but without ovaries, uterus, or vagina is a specimen heretofore unheard of. Were this case exactly as represented in the above history the views of gynæcologists regarding the relations of the sexual organs to the general organization would require to be modified. We may, however, be permitted to say that because Dr. GARRIGUES did not find the ovaries in a woman without a vagina is not sufficient proof that these organs did not exist.]

A. J. C. S.

Phosphide of Zinc for Dysmenorrhea and Sterility.

Dr. DECOUX claims to have had excellent results from the administration of phosphide of zinc in cases of dysmenorrhea with anemia. He cites in full, in *l'Union Medicale* a case of obstinate dysmenorrhea which had persisted against various forms of treatment through the whole of the patient's menstrual life, and sterility continuing through five years of married life. He administered daily 16 milligrams ($\frac{1}{4}$ gr.) of phosphide of zinc, one half the quantity at breakfast and the remainder at supper. Having pursued the treatment for twenty days, the menses appeared without pain, and before the second period had arrived she had conceived. She bore her child and nursed it, and eleven months later the menses returned with pain as severe as formerly. After eight months of suffering she resumed the use of the phosphide of zinc with results almost identical with those obtained the first time.

He suggests two reasons for the lack of success in the use of this medicament, viz., inefficient doses and unreliable preparations. He says that while chemically the phosphide of zinc contains

one-fourth of its weight of phosphorus, it acts as if it contained only one-eighth, as half of the quantity fails to be absorbed. Hence, in order to administer one milligram ($\frac{1}{61}$ gr.) of phosphorus it is necessary to give eight times that quantity of the phosphide of zinc. The attempt to secure therapeutic results from the minute doses is a failure.

Further he claims that the amorphous phosphide of zinc is inert and the crystallized preparation only is effective.—*Weekly Med. Review.*

Lecture on the Significance of Uterine and Vaginal Discharges.

DR. ROBERT BARNET (*Gaillard's Med. Journal*).

Discharges of Air.—Air may get into the vagina, if not into the uterus, in the non-pregnant state. In the normal condition the walls of the vagina are maintained in perfect contact, and no air, or probably very little, is admitted, but where the parts are greatly relaxed, the vulva open as when the perineum is torn, the lower part of the vagina is no doubt exposed to the contact of air. But the very condition of patency prevents the retention of the air to such a degree as to lead to its escape in perceptible volume. Air also penetrates where too large a pessary is worn, which keeps the vaginal wall apart. But under peculiar circumstances air enters in large quantity, to be expelled with noise.

If you observe the vagina when the duck-bill speculum is applied you will see the movements of rise and fall under the influence of the rise and fall of the diaphragm. Dr. Adolph Rasch has investigated the phenomenon with great care. He says if a multipara, whose genitals are normal, be placed on her back, with the thighs flexed and abducted and the vaginal orifice closed,

movements caused by respiration are seen, but no air enters. In the lateral position the same thing is observed, even if the vagina is lax, and even when the perineum is ruptured. When the patient is placed in the prone position, or on all-fours, if the vulva be open air will enter, because the intestines falling downwards by gravity cause a vacuum. Under this condition violent exertion may expel air, giving rise to vaginal flatus. If the abdomen be supported by the hands or by a bandage, no air enters.

There are several interesting applications of this knowledge. It teaches that the best position after labor, if not during labor also, is the dorsal; that the same position is also best in the case of pelvic abscess or hæmatocele discharging into the vagina, and that we must carefully consider this respiratory rise and fall of the vagina when selecting pessaries. It is by turning to account this action that we derive the greatest advantage from the spoon or Sim's speculum. The blade drawing the perineum well back, while the semi-prone position of the patient favors the falling forwards of the abdominal viscera, air fills the vagina, counteracts the effect of inspiration, and thus enables us to get a good view of the os uteri. The same position also greatly aids our efforts at reducing inversion of the uterus and in replacing a prolapsed umbilical cord.

In most operations, however, upon the uterus and vagina, where it is of importance to bring the uterus as low down near the vulva as possible, the dorsal position, by bringing the force of gravity to counteract the respiratory rise of the uterus, which can further be greatly aided by direct pressure by an assistant's hand above the symphysis pubis, is the best.

What is the source and nature of this

hydrorrhœa gravidarum? Several theories have been expounded. The character of the fluid differs in some respects from that of liquor amnii. It is odorless, and resembles blood-serum or the serous fluid effused in the peritoneal sac.

Ruysch and Rœderer thought it came from ruptures of lymphatic vessels, or of hydatids of the uterus. Bohmer thought it escaped from a second abortive ovum; Delamotte and Cruveilhier, that it came from a cyst near the ovum; Deleurye, Puzos. Naegele, and Dubois, that it came from the inner surface of the uterus, being secreted externally to the ovum. Dubois says it is the result of loosening of the membranes from the uterus when the vessels pour out serum. Hegar says the source is the uterine glands of the decidua. Thus he describes the glands of the mucous membranes as being found in the decidua at the sixth month of gestation, and argues that their sudden disappearance in the subsequent months is improbable. In a case of hydrorrhœa he found in the decidua vera, at the beginning of the eighth month, an enormously developed glandular body. At the bottom of this morbid growth was a general hypertrophic condition of the decidua and its glands. These gave out the excessive secretions.

In a case related by Dr. Graef, repeated discharges took place, and the foetus expelled at the end of six months. The membranes were very delicate, and openings were found in them. In this case it is probable that the fluid was true liquor amnii. In another case the patient suffered during the last three months from repeated watery discharges, the uterus rising and falling with the gathering and escape of the fluid. The membranes were found without rent.

Graef regarded this as a case of catarrhal hydrorrhœa.

I believe there are various sources. In some cases the fluid is liquor amnii. This may come either from rupture of the membranes, from rapid transudation under pressure, from rapid formation and accumulation of liquor amnii in the amnion, or from the bursting of a cyst formed between the amnion and chorion, or between two layers of chorion, the proper amniotic sac remaining intact. In the majority of cases, however, the fluid is not amniotic; for when once the amniotic sac has fairly ruptured, labor is not far off. It is, then, the result of a rapid secretion from the uterine glands or from the cervical cavity. In the early months, while there is still a free space between the decidua vera and the decidua reflexa, there is a large area of glandular surfaces.

I have observed a *puerperal form of hydrorrhœa*. Thus watery discharges may continue for a month or longer beyond the proper lochial flow. Generally in these cases the water is dirty, discolored, occasionally stained with blood, and offensive. The most common cause I have found to be the retention of a portion of the placenta or of clots in the uterus; but a polypus may produce like results. The watery discharges alternate, but not always with discharges of blood. The fluid may, under certain conditions, collect in considerable quantity in the uterus, so that the organ becomes greatly distended before the collection is expelled in a gush.

Sometimes watery fluid is mingled with air, constituting *physo-hydrometra*. This is also a puerperal or post-puerperal condition, and is commonly the result of retention of some portion of placenta or membranes and the admission of air into the uterine cavity. If an examination is made when the uterus is relaxed

after labor, especially if the hand be introduced into the uterus, the vaginal walls are separated from their usual contact and a channel is formed along which air easily enters. Merely turning on the side, or a little more prone, will often, by favoring the fall of the uterus forward, produce a vacuum into which air will rush. This is one of the reasons, among others, why I am unable to approve of the abolition of the old-fashioned binder, which some people would condemn for no better reason than I can see than because it is old-fashioned. After labor, especially in pluriparæ, the abdominal walls are so relaxed that they can give no support to the uterus. The binder does temporary duty for the inert abdominal walls.

The history of physio-hydrometra is, I believe, this: A portion of placenta, membranes, or clots remains in the cavity of the uterus after labor; some air gets in as I have described; decomposition ensues, and the gases of putrefaction are added to the air from without, while the os uteri is occluded by the placenta or blood-mass falling over it. When this occurs there is invariably hectic or irritative fever; peritonitis and septicemia commonly attend; great abdominal pain; the enlarged, distended uterus can be mapped out, rising as high as or higher than the umbilicus, and resonance is made out on percussion.

One condition, the result of impregnation, often leads to copious and repeated discharges of watery fluid—the *hydatidi-form degeneration of the chorion*. In this case the ordinary signs of pregnancy may not be present, and even the patient herself may not think she is pregnant. There is, however, always evidence of enlargement of the uterus, and generally great pelvic distress. The water escapes in gushes at uncertain times; it is often tinged with blood,

resembling red-currant water; it has not the offensive odor belonging to the watery discharges of cancer; sometimes, but not often until late in the progress of the case, cysts will be found swimming in the water. It is generally expelled with painful uterine contractions.

Apart from pregnancy, watery discharges are often of grave significance. During and after the climacteric period, the most frequent cause is some form of malignant disease, especially the so-called cauliflower excrescence of the uterus. In this case other symptoms will probably point to the seat and nature of the disease. The fluid discharged is seldom clear; it is generally turbid, dirty, often tinged with blood, resembling water in which flesh has macerated; it contains shreds of flocculi of solid matter, the proceeds of superficial erosion or necrosis of the surface of the diseased growth, and is almost always of a peculiar offensive odor. It often alternates with hemorrhage. Local exploration will place the nature of the case beyond doubt. Another form of malignant disease giving rise to watery discharges is the "oozing excrescence of the labia."

State of Cervix Uteri During the Sexual Orgasm.

DR. PAUL MUNDE, (*Amer. Jour. of Obstetrics*): We ourselves have seen the gushing, almost in jets, of clear, viscid mucus from the external os during evident sexual excitement produced by a rather prolonged digital and specular examination in an erotic woman (a "femme entretenue," a blonde Swede). The lips of the external os alternately opened and closed, with each gaping, emitting clear mucus, until the excitement (which we confess to having intentionally prolonged by gently titillating the cervix with a sound through the

Sims' speculum) reached such a height as to cause the woman to sit upon the table, and thus end the experiment. It should be stated that a nurse was present, and in view of that fact it was thought allowable to use this exceptional opportunity to test the correctness of the observations of the late Dr. Joseph R. Beck, of Fort Wayne, Ind., and of Dr. Wernich, of Berlin, to the effect that the external os alternately contracts and dilates during sexual excitement; a confirmation of their views was the result.

Tuberculosis of the Uterus.

Dr. W. J. JONES, of Baltimore, calls attention to this condition, which, though comparatively rare, yet has not received that attention from gynecological authors to which it is entitled. The clinical diagnosis can be based upon a persistent leucorrhœal discharge and other symptoms which would point to uterine troubles; and in any patient of a tuberculous tendency, in which these symptoms are present, we should be led strongly to suspect an involvement of the genital organs. The diagnosis is often aided by the expulsion of caseous masses from the uterus. The author evidently agrees with Koch, for he considers the discovery of the bacilli in the secretion a sure means of diagnosis. In the event of such a case found during life, before the secondary involvement of the surrounding tissues has taken place, a knowledge of how to treat it will present itself for consideration. The authorities which he has examined upon that part of the subject have little or nothing to say. Good hygienic surroundings, tonics, and good food, and perhaps the use of iodoform topically, might at least keep the disease at bay, and thus prolong the patient's life.—*Med. News.*

Removal of Cancerous Growth from the Uterus.

As an application after the removal of a cancerous growth from the uterus, Prof. PARVIN advises:—℞. Iodinii; Brominii, āā 3 j.; Acid. carbolic. crystal, 5 ss.; Alcohol, 5 j. M. SIG.—Apply by means of absorbent cotton.—*Coll. & Clin. Record.*

Amenorrhœa.

For amenorrhœa dependent upon debility, Prof. PARVIN advises the following, speaking very highly of its utility:—℞. Ferri sulphat. exsicc., gr. j.; Aloës, gr. j.; Olei terebinthinæ, ʒj.; M. Ft. pil. SIG.—One ter die.—*Ibid.*

Capacity of the Female Bladder.

J. H. NEALE reports (*Brit. Med. Jour.*), a case in which on the day following delivery, the patient had voided about a pint of urine. On the second day he noticed an odor of urine on entering the room, and the nurse remarked that there was "some trouble with the lady's water." On introducing a catheter, he drew off ninety-six ounces of urine. On the following day about half that quantity was taken in the same way, and as this had a faint ammoniacal odor, he washed out the bladder with a solution of hyposulphite of soda (one drachm to the ounce). There was no further trouble.—*Weekly Med. Review.*

On the Treatment of Menorrhagia.

Dr. H. B. RITTER (*Med. Herald*): *Palliative Treatment.*—First of all the patient should be kept quiet and in the horizontal posture. This will tend to quiet the circulation and will also lessen the blood-pressure upon the uterus by removing the pressure of gravitation. By elevating the hips, which is done

best by elevating the foot of the bed, you still further diminish this blood-pressure. I have seen cases where the hips were elevated by placing pillows beneath them; this, however, I do not think a good plan, as it keeps the pelvis too warm. Remove excitement of all kinds and give her complete rest.

Quietude in the horizontal posture is so necessary in these cases on account of the rich vascularity of the parts and on account of the veins going from the uterus to the inferior vena cava having no valves. When the woman assumes the erect posture the pressure of the whole column of blood in the inferior vena cava is upon the uterus. Neglecting to observe this rule has caused many a patient to linger along with menorrhagia when otherwise she would have made a rapid recovery.

If there is constipation, and the woman is not too weak from the loss of blood, it is well to give a saline cathartic. This places the organs in a more natural state and also attracts the blood to another part of the body. Ice-water, lemonade or other acidulated drinks may be given freely, but warm teas should be interdicted.

Cold cloths may also be applied to the abdomen and vulva for the purpose of producing contraction by reflex action. Injection of cold water into the vagina is sometimes practiced, but have never tried it, as I am not favorably impressed with it. Hot water injections are also used; the hot water has the same effect upon the vessels as the cold water, both causing contraction of them. Of the two I would certainly give preference to the hot water.

If there is much nervous irritability the administration of bromide of potash or opium will be found useful. When the hemorrhage is due to engorgement, the result of masturbation, or to ungratified

sexual desires, potassium bromide is useful both for stopping the hemorrhage and to prevent the return of it.

Certain remedies taken internally act as hemostatics, and some of these should be administered. A great many medicines are classed under this head, but only a few are trustworthy. Prominent among them we find ergot, gallic and sulphuric acids, quinine, Indian hemp, acetate of lead, strychnine and arsenic.

Gallic acid, sulphuric acid and acetate of lead seemed to be used extensively. I have tried all three of them, and as I believed them to have hemostatic powers they were tried faithfully, but cannot say that I have ever found them efficient, and consequently I now regard them as almost valueless.

Ergot is the old stand-by; it is used by all and its value seems to be fully appreciated. When there is menorrhagia the uterus is usually in a relaxed state and the blood vessels are enlarged. Ergot acts by producing contraction of the uterus and diminishing the calibre of the blood vessels. This explains why ergot is so useful in these cases. To get this contraction ergot must be given in full doses and frequently repeated. It may be given in substance, wine or fluid extract. The latter is, in my estimation, the best preparation, and should be administered in half-drachm to drachm doses every third hour. Some times ergot fails to do good, and then other measures will have to be resorted to.

Quinine acts similarly to ergot, and is therefore useful when the uterus is enlarged and relaxed. It also must be given in full doses—about five grains every fourth hour. Although its action upon the uterus is like that of ergot it sometimes stops the hemorrhage when ergot has failed. I usually give it when

the patient is malarious at the same time, and then generally as an adjunct to one of the other hemostatics.

Indian hemp or *cannabis indica* is, in my estimation, one of the most valuable of all our hemostatic agents. It is the equal to ergot, and sometimes arrests the hemorrhage when the latter has failed, but must also say that ergot has proved itself efficient when the *cannabis indica* has failed. It may be given in the form of tincture or solid extract. The tincture should be given in doses of from twenty to thirty drops every second or third hour. It is best administered in syrup of acaciæ, as water precipitates the resin. If there is any objection to the taste of this mixture give this extract in one-half to one grain doses in pill form. Our works on *matéria medica* say little or nothing about the action of this remedy on the uterus. We know that it allays nervous irritability, quiets the circulatory system and also produces sleep, and in this way it undoubtedly benefits the patient. But the value of the remedy cannot be attributed solely to this action; the probability is that it causes contraction of the non-striated muscular fibres. In whatever manner it may act I can conscientiously recommend it as an hemostatic.

Strychniæ and arsenic are also used in the treatment of menorrhagia, but they are most useful after the flow is stopped. They are indicated when the patient is debilitated and when there is an oozing of blood from the mucous surface of the uterus. They seem to lessen the capillary circulation and to bring about a more healthy state of the uterus. They should be given three times a day, after meals, and must be continued for a considerable time.

We have now taken up the treatment that suffices in all ordinary cases.

Should it fail, or if the hemorrhage is so profuse that you consider it dangerous to wait for these hemostatics to act, we have a sure resource against the hemorrhage in the vaginal tampon. The tampon to be efficient must fill the whole vagina, extending from the uterus to the vulva and must put the whole vaginal wall on the stretch. A small piece of cotton or a sponge placed up against the neck of the uterus need not be expected to prevent hemorrhage, this only makes it appear for a time that the hemorrhage is stopped; as soon as the sponge or cotton is saturated with blood the flow again makes its appearance externally. The tampon can be used in all cases of menorrhagia excepting those due to cancer of the neck of the uterus, as the tampon then breaks up the tissues and in that way increases the hemorrhage. When due to cancer the best treatment is the local application of astringents, as alum or tannin, or the application of caustics, which arrest the hemorrhage by destroying the surface.

Now and then, after removing the tampon, the flow again makes its appearance, the plug in the vagina arresting it only so long as it is in position. Here more energetic measures will be required. Dilate the neck of the uterus with a sponge, laminaria or tupelo tent, and then with a probe or sound wrapped with cotton at the distal end apply to the interior of the uterus tincture of iodine, a saturated solution of carbolic acid or some strong astringent solution. Sometimes the neck of the uterus is sufficiently open to permit these applications without the use of the tents. Thorough cauterization of the whole interior of the womb with fuming nitric acid is recommended by Dr. Atthill, but such severe measures are rarely called for. With these means

menorrhagia can always be stopped, and as soon as the patient has recovered from the loss of blood the curative treatment can be commenced. Make a thorough examination to determine the diseased condition of which it is a symptom and then apply the treatment for that. You may find a granular surface on the neck of the uterus or it may be due to a similar state in the body of the uterus. Again it may be due to subinvolution or growth from the uterus, as polypii or fibroid tumors. Displacements, inflammation and simple engorgement of the uterus and cancer are other causes. Remove whichever of these diseases that you may find and you prevent a return of the menorrhagia.

Retroversion of the Uterus.

The *Coll. and Clin. Record* reports an interesting clinical lecture by Prof. PARVIN, of which the following is a short abstract :

Schultze opposes the use of the sound for the reposition of a retroverted womb, claiming that manual reposition is safer and more efficient. The patient should be lying upon her back, the lower limbs flexed, and, while an ordinary bed will answer in most cases, in some it is important to use a table, to the edge of which her hips should be brought, so as to permit lowering the hand if the fingers must be pushed far up either in the vagina or in the rectum. The index and medius of one hand are passed into the vagina—it is only in case they cannot thus pass high enough that they are introduced into the rectum—while the other hand is placed upon the abdomen to be used as will presently be explained, for this is really bi-manual reposition. Let the two fingers in the vagina, or in the rectum, be placed as near the fundus, from the posterior wall of the uterus as they can be ; a gradually in-

creasing pressure pushes the body of the womb along the sacrum, towards the promontory, but on its way letting the organ move towards this or that side as may be done the more easily. As soon as the fundus is brought to the inlet the external hand is used, pressing and insinuating two or three fingers behind the fundus thus raised by internal pressure, and this may be done in case the abdominal walls are not thick, or very sensitive. Having once got the fingers behind the fundus, those in the vagina are removed from the posterior cul-de-sac, and one of them placed in front of the neck of the womb, in order to push it back, while the external hand draws the body forward. If you should find it necessary to pass the fingers into the rectum in order to effect this reposition, it would be advisable to anæsthetize the patient, for you would probably cause her decided pain, and beside, when anæsthetized, she could not object to this use of the fingers, which, of course, would be very repulsive to her. The womb in this patient is so movable, the abdominal walls so thin, that I find no difficulty in the reposition with the fingers in the vagina and the hand upon the abdomen ; even while I have been describing this bi-manual method I have almost accomplished it, and I think without giving the patient much pain.

Having the uterus in place, the next thing is to introduce an instrument to keep it there. Bantock, after replacing the organ holds it in position with the sound, until he slips over the instrument a pessary and puts it in position. If the deviation of the uterus be recent, we may do as advised by Schultze, introduce a cotton tampon, not behind, but in front and below the vaginal cervix. However, most of the cases one sees are not recent, but chronic, and, therefore, he cannot depend upon a

temporary means of maintaining the reposition. As a permanent means no instrument is of such general usefulness as Dr. Albert H. Smith's modification of Hodge's pessary.

The pessary to which I referred a moment ago is usually spoken of as a lever pessary—the inventor, the late Prof. Hodge, so named it—but probably its chief, according to some its sole, action is by its pressure upon the posterior vaginal cul-de-sac to hold the neck of the womb backward and therefore indirectly keep the body of the organ forward. Now, some of the objections made to this instrument are, first, this portion of the posterior vaginal cul-de-sac may be so relaxed that no restraining influence is exerted upon the movements of the neck, or this cul-de-sac may be too sensitive to bear the pressure of an instrument, or it may be so shallow that the instrument has no power, or it may become so stretched by the long wearing of the instrument that all control over the movement of the neck anteriorly is lost, and if the neck moves forward, of course the body of the womb moves backward. However, the lesson which ought to be impressed on you is, that there is no universal pessary; no instrument has been or can be devised which will answer for all cases, even of retroversion of the uterus.

I desire, now, to direct your especial attention to the figure-of-8 pessary advised by Schultze. To make the pessary I take this block-tin ring—Schultze uses a copper wire ring covered with rubber—the ring having a diameter of 3.3 to 3.9 inches, and first change the circle into an ellipse. Now, I place the thumb and finger of each hand at the ends of the long diameter of the ellipse, when, while still keeping the instrument well stretched, I turn one end so that the sides are made to curve obliquely,

and the ellipse is converted into two connected circles, or ellipses, into a figure-of-8. These circles should not be the same size. The next step is to curve the entire instrument, giving it thus, nearly the form of a "Hodge." The smaller of the two rings is intended to be large enough to receive the vaginal part of the neck of the womb, and prevent its moving forward; as you readily see, if the neck is thus held, it is impossible for the body of the womb to go back; that is, the retroversion is prevented. The important rule to be observed in shaping and adapting Schultze's instrument, is to hold the neck; to accomplish this, not only must the ring or loop of the instrument which receives the neck be of proper size and form, but the anterior part of the instrument must be so shaped that the loop will not slip off of the neck. You at once see that very careful adaptation is required, and one must, in most cases, frequently change the form of the instrument in order to secure the essential end.

After the instrument has been given the required shape, as proved by its retaining the womb in its normal position, it is advised to take it as a model from which an instrument of hard rubber or of aluminum, which will be lighter and permanently keep its form during the period—generally several months—which the instrument must be worn, if you hope to effect a permanent cure.

If the figure-of-8 pessary does not answer, Schultze advises what he calls a sleigh-runner pessary. Again, I make an ellipse from a block-tin ring pessary, somewhat flattening the sides of the ellipse, then give it a curvature like that of a sleigh-runner, and next make the part which is to be in the front portion of the vagina broader than that which passes in the posterior cul-de-sac. You see that this pessary differs in a very

material point from the "Hodge" and from the "Smith"—in the former, the sides of the instrument are parallel, and in the latter they converge anteriorly, while in this form of the "Schultze" they diverge, so that the anterior bar is much longer than the posterior.

I can see some very great advantages in Schultze's instrument, only it probably requires a nicer care in adjustment and application than most other instruments. One of its advantages is its small size; a large pessary is, as has been said of a great book, a great evil; especially is such a pessary an evil if it opens up the vagina so that air is admitted, for then, as has been observed, decomposition of vaginal secretions occurs. In certain cases, as I have previously mentioned, cotton, especially iodoform cotton, and glycerine, is very useful as a pessary; but this cannot be worn constantly, since, after a time, the cotton irritates the vaginal walls.

DISEASES OF CHILDREN.

Cows' Milk.

It is a well-known fact that the quality of the cow's milk changes with the time lapsing after she has calved. On first calving it is decidedly laxative. Later on it loses this property, and at the end of a year the milk of a farrow cow is very astringent. The milk of the cow with calf also gradually changes with the period of gestation, becoming increasingly watery and having a limy taste. It is evident, therefore, that a child fed on "one cow's milk" must, during the course of eighteen months, receive quite a variety of food, and that at times during this period this food is not strictly of a physiological nature. In the supply of our cities, moreover,

no care, of course, being taken to keep these different varieties separate, the milk must be of a very heterogeneous nature. To obviate the dangers which are associated with this variation in the quality of milk, Mr. Lloyd F. Abbott advises (*Boston Medical and Surgical Journal*) the spaying of milch cows. The results which he claims follow this operation are: 1. Increase in the quantity of milk. 2. Constancy of quality. 3. Improved quality of milk. 4. Decrease in cost of keeping the cow. 5. Prolongation of the milk-giving period. 6. Increased readiness of fattening the animal and improved quality of flesh. He spayed a cow in November, 1880, at which time she was giving ten and a half quarts of milk daily. At the date of writing, February 27, 1884, the cow was still milking and giving nine and a half quarts a day, and of better quality than that given by a cow having her ovaries. Dr. Mecuen, who took part in the discussion of Mr. Abbott's paper, stated that one cow from which the ovaries were removed has produced milk continuously for eleven years, and in this entire period has fallen off only three pints.—*Gaillard's Medical Jour.*

Cholera Infantum.

Dr. J. LEWIS SMITH (*N.E. Med. Monthly*): R. Tinct. opii, gtt. xvj.; Spts. ammon, aromat., 3 ss. to j.; Bismuth subnitrat, 3 ij.; Syr. simplic, 3 ss.; Mistur. cretæ. 5 iss. M. Sig.—One teaspoonful every two or three hours to a child of eight to twelve months, until vomiting and diarrhœa are controlled.

Total Obliteration of Urethral Canal in a New-Born Child; Operation; Recovery.

Dr. EDWARD WOOD FORSTER reports the following case in the *Brit. Med. Jour.*:

On January 3, Mrs. J. was confined at full term of a handsome and fully developed boy. A slight venous congestion marked the sight of the urethral orifice, on the under side of which there was a shallow groove of about the one-sixth of an inch in length, not, however, dipping into the urethral site, nor taking from its normal length, but infringing slightly upon the frænum. The prepuce was retracted. The examination evidenced occlusion, and the symptoms called for prompt action.

At 7:30 P. M. the infant was placed under chloroform by Dr. Fothergill, who ably controlled the anæsthetization throughout.

The operation consisted in a gentle, but firm screwing and pushing movement through the occluding material, and it proved that the canal was obliterated in its entire length. When approaching the neck of the bladder, the index finger of my left hand was passed into the rectum, and retained there as indicator and gubernator, until the catheter had passed through the membranous and prostatic portions, and had freely entered the bladder. Very little blood was lost. The instruments used were a probe, director, a stout curved stilette, and a small sized catheter belonging to a pocket-case. The stilette required very delicate management but proved an apt instrument. The boring to the bladder was affected by the catheter, and water immediately flowed. An oiled bougie was passed for two or three days; the wound healed rapidly, and, strange to say, the infant never showed signs of any suffering from the flow of urine over the abraded surface. At the end of a week or ten days the cure was complete and remained so.

This case is interesting because of its rarity. Sir Henry Thompson, in his article on "Diseases of the Urinary

Organs," in Holmes' *System of Surgery*, says, "The canal is sometimes occluded, and this produces retention of urine and death during the early hours of life."

We may possibly conjecture that, in this case, the developmental process had been somewhat checked, the "uro-genital sinus" retaining something of its original character. The very slight hypospadias would give force to the supposition.—*Med. & Surg. Reporter*.

An Ossifluent Abscess of the Orbit of a Nursling Cured by the Administration of Iodide of Potass to the Nurse.

The following case (*Paris Medical*) will prove that certain affections of the new-born, not depending upon a special diathesis, can be cured by giving the appropriate remedies to the wet-nurse. These medicines pass through the milk and are ingested by the nursing child. The abscess was on the level of the lachrymal sac, and some physicians thought it a lachrymal fistula, but there was no direct communication with the lachrymal sac. Cure was effected in a fortnight.—*St. Louis Med. & Surg. Journal*.

Discussion on Croup.

Dr. J. SOLIS COHEN (*Med. and Surg. Reporter*), in opening the discussion, said: The principal impression gained from this paper is the importance of tracheotomy. As regards the identity of these diseases, while I contend that there is a difference, I am not prepared to recognize so great a difference as is claimed by the reader of the paper. Croup and diphtheria do not present in the alleged proportionate frequency. True membranous croup is a very rare disease, and that is the reason so many disbelieve its existence. The series of successful tracheotomies, reported by Dr. Crandall, is very remarkable, and I trust that in

future his success may continue to be as great. It is certainly greater than any that has been reported in this or any other city probably in the United States. Some years ago (1873), I prepared a paper for this Society, in which the results of more than five thousand cases were given. The proportion of successful operations was about one in four. Before that paper was presented, operations had been rare in Philadelphia; since then they have become more frequent. The ratio of success is not always maintained in one's later experience. Thus the late Dr. Hodge, who at one time reported four cases, three of which recovered, told me that he had subsequently operated seven times in succession without another recovery. Dr. Jacobi, whose success had been exceptionally good at one time, informed me some years afterward that he had been so unfortunate as to lose one hundred cases in succession, and thus his early confidence in tracheotomy has been modified.

The reason for this variation of results is, I think, plain. We are careful of our first cases. We see them frequently after operation, just as the writer of the paper has done. When we become older this time is not at our disposal. The after-nursing I regard as of the very highest importance, and I have long made it a rule never to operate unless sure that this will be properly attended to. The time for operation is a question of great moment. The best rule is to operate as soon as the thought of the necessity comes into your mind. Success depends on early operation, other things being equal. The tube appears to me to be a necessity. To dispense with it I regard as dangerous, notwithstanding it is thought by some to produce irritation, and thus favor the deposit of new membrane. A few years ago, impressed

with the encomiums of Dr. Martin, of Boston, I adopted the plan of keeping the edges apart by ligature without a tube; but inattention in nursing allowed the opening to become so frequently occluded by the soft parts, in the motions of the child, and suffocation, fortunately overcome at the moment, having ensued on one occasion, I have felt no desire to repeat the experiment.

Steam in the room, and the maintenance of an equability of temperature, are important. If I had but two things to depend upon in croup, I would choose vapors from slacking lime. But a small piece in a pan of water upon the stove will not answer. Copious disengagement of vapors are needed, just such as were produced by the ignorant Irishman mentioned in the paper. I have no notion that the action of the lime is chemical, although I am aware of its slow action on membrane in a test tube. I believe that it acts mechanically. Small particles of lime are carried up with the vapor of water; these get under the false membrane which does not everywhere hug the tissues closely, and act as minute wedges; the accompanying vapor of water follows and detaches the products.

I believe that I have seen life saved more frequently by lime used in this manner than by tracheotomy. Dr. Crandall has been fortunate in braving the contingencies that surrounded some of his cases. There are very few men brave enough to operate without adequate assistance, and with the light furnished by an uncertain lamp. Anomalous blood-vessels often give unexpected trouble.

As regards the point of incision, my own plan has been to perform the low operation—that is the one below the isthmus of the thyroid gland. A larger tube can be inserted there, and the

wound is farther from the seat of disease. It is true this is the more difficult operation, but there is no occasion for a hurry, unless immediate death is threatening. The ten or fifteen minutes required for a deliberate operation steal nothing from the patient's chance of life. In an emergency, of course, there is no choice. All the tissues may have to be incised in one cut. Another fact rendering the lower operation more favorable is the lessened liability of coming directly upon masses of pseudo-membrane, which may be forced down the trachea in the very act of incising it.

An important point, too, not appreciated by the majority of operators, is that this false membrane is a foreign body, and should be removed. The first thing to be done after the trachea is opened, is not to put in the tube, but to make a thorough search for a false membrane, and to remove all within reach. Then the edges of the cut should be kept asunder and cough be excited to drive more out. If this were done more frequently the statistics of recovery from the operation would be much more favorable.

We sometimes have hemorrhage to deal with. The best method to treat this is to plug the wound about the tube with absorbent cotton. Never hunt for the vessels; pressure gives the best results. The character of the tube is important; these are often found made of hard rubber, but I do not consider such material desirable. It is thicker than silver, thereby lessening the calibre, and does not tarnish when the wound goes wrong; and this latter characteristic of silver tubes is frequently of service. The tube should be of equal calibre throughout, and not made tapering, so that the patient may get all the air he is supposed to get.

[In answer to an inquiry from Dr. II.

R. Wharton as to his use of chloroform, Dr. Cohen replied that the operation was made easier by anæsthetics, but the safest plan is not to use them. Ether is out of the question, if ordinary artificial light be close. The patients were usually numb and insensitive from impending carbonic acid poisoning, and when retaining sensibility often seem to understand the purpose of the operation, and do not struggle. Struggling should be prevented by wrapping the trunk and limbs in a sheet or towel.]

Night Terrors in Children.

A clinical lecture by Dr. W. B. ATKINSON: We are told, gentlemen, by the mother of this child that she has had for over a year the habit of starting up in the night and screaming as though in a great terror. She is five years of age. An examination shows no signs of disease. Her appetite is good, she digests well, her bowels are regular, in short, she appears to be in excellent health. She has what is known as "Night Terrors," an affliction which is apparently quite well known in certain families, attacking in succession each little one as it arrives at a sufficient age to allow of the recognition of the trouble. Unfortunately, however, it is too often not understood by the parents, and we find those in charge of such children endeavoring by threats and chastisement to break them of what they regard as a bad habit.

Such children should be regarded as subjects for the exercise of the greatest kindness. I am firmly convinced that want of proper care and treatment of this affliction will lead in some cases to insanity more or less pronounced, to imbecility, and always proves injurious to the child's mental powers.

We often find it associated with nocturnal incontinence. Frequently the

first symptom complained of is the "wetting of the bed." In fact, I have often had a child brought to my clinic for the relief of this symptom, and upon inquiry I would find that it also had this habit of starting up with loud screams as of terror, which the mother had regarded as of no consequence save from the annoyance thus occasioned in the household. This incontinence of urine in most if not all cases is, I believe, the result of the fright. As in hysteria, or in other forms of nervous disturbances, the sphincter vesicæ gives way, and the contents of the bladder are thus involuntarily discharged.

I am satisfied that this ailment often commences at a very early age. Those who have opportunity for studying the cases of many children will find instances constantly occurring where even the young infant will scream out in its sleep and start up with every indication of terror, only to be quieted by fondling and the presence of some one whom it regards as able to protect it.

In some children it is seen even as late as the age of puberty, and in such cases the subject of it will experience the most unaccountable dread of the approach of night, or of darkness, and will gladly welcome anything in the shape of a companion.

The actions of its victims are very various under an attack. One child will spring from its bed and with fearful screams rush to a place of safety, it may be to its parent's arms, it may be to a crowded room, regardless of its scanty attire or any other matters. Another will walk without uttering a sound, with eyes wide open and face as if fixed in fear, and apparently walking in its sleep, yet on reaching a supposed place of safety it will convulsively sob and clasp hold tightly to some one as if fearing pursuit. A third will in its fear cover

its head with the clothing and lie quivering in dread until it falls into an uneasy slumber, from which it wakes in the morning unrefreshed and with aching head.

The causes have been supposed to be the presence of worms in the intestinal tract, especially of that form known as "seat" worms, which, by reflex excitement induce this nervous affection; indigestion, as when the child has been allowed to load its stomach with trash, or even with good food in too great quantity; nervous excitement in older children, as from foolish stories or injudicious reading; mental strain, as from too close study, or from cares beyond endurance at so early an age.

The prognosis depends greatly upon the length of time that the case has lasted, the causes when known, and the possibility of their removal, and the nerve powers of the subject. A child born of a mother of highly excitable disposition inherits to a marked degree its mother's infirmity, and when it becomes liable to such attacks is always difficult to cure; in some cases relief comes only after a long persistence in the appropriate treatment, or as the child grows to mature years other nervous disturbances come in to supplant it.

The treatment will be, as in all cases of disease in children, to follow the indications, and act accordingly.

Always try to prevent an attack by insisting upon a light supper of easily digested food. Avoid all stimulants, as coffee or tea, for the evening meal. Let the child sleep in a room sufficiently lighted, that the eye may not be compelled to strain its powers in the endeavor to make out each object in the room. It must be remembered that in a dim light even a well known object frequently takes on a weird, uncanny appearance. The child should be cov-

ered with clothing sufficient to preserve a natural warmth, yet not overburdened, as this alone will make it restless and liable to sleep imperfectly, thus predisposing to an attack.

Should an attack occur, sooth it in the kindest manner. Never by harsh words or blows endeavor to subdue the excited condition. It is far better for the mother or nurse to lie down by the child, and by such presence enable it to sink into slumber with a feeling of confidence and safety.

The general treatment will be in this case the exhibition of bromide of potassium, say five grains in a drachm of syrup simplex every four hours.

Note.—This child returned at the end of ten days so much improved that the mother declared it perfectly well. The child had ceased to exhibit any restlessness, and no longer screamed at night.

As I told you at the outset, in all cases of diseases of children it is advisable only to prescribe for indications. Generally a most excellent tonic for children is a combination of phosphoric acid and iron. In these cases such a tonic is usually required and proves of value. Where evidence exists of a general want of tone I order:—℞. Potas. bromidi, gr. L.; Ac. phos. dil.; Tr. ferri chlor. aa., f 3 ij.; Syr. limonis.; Aquæ, aa. f 3 jss. M. Teaspoonful every four hours for a child from three to five years of age.

You will remember that I prefer in all cases of children's diseases to begin with a small dose and increase its frequency or its size as indication may demand.

The treatment where this affection seems to be connected with parasitic trouble will be adverted to as such cases occur.—*Arch. Pediatrics*

OBSTETRICS.

Crede's Method of Delivery of the Placenta.

Dr. W. H. TAYLOR, in the *Cincinnati Lancet and Clinic*, says: The vigorous controversy over "Crede's method," which has recently involved so many obstetricians, has led Crede to restate in detail the manipulation he advises. As many American practitioners habitually adopt what they believe is his practice, I think it will be of interest to know exactly what that method is. I therefore have translated his own description, giving the italics as found in the original, in the *Archiv. fur Gynakologie*, xxiii, 2, 213:

. . . "The natural detachment of the placenta occurs within a few minutes after the birth of the child, and is recognized by a discharge of blood and by marked diminution of the size of the uterus, which may now be felt as a firm ball, the size of a child's head, between the umbilicus and pubes. As soon as any after-pains have occurred the midwife grasps the entire uterus through the abdominal walls with both hands and presses it toward the concavity of the sacrum; she repeats this *several times*, if necessary, *but only during a pain*, until the placenta is found at the vulva or is entirely expelled. If, from imperfect contraction of the uterus, or from tenderness of the abdominal walls, sufficient pressure to expel the placenta can not be made, the attendant, guided by the umbilical cord, feels carefully in the vagina for the placenta; if a portion is felt, then, with one hand, *gentle* traction is made on the umbilical cord, while with the other pressure is made over the uterus. If the point of insertion of the cord in the placenta can not be reached, or if on *gentle* traction of the cord resistance

is felt, no further effort to deliver the placenta in this way may be made until after *several uterine contractions* have occurred, which may be increased by *gentle* rubbing and pressure. If the placenta is found low in the vagina, and readily reached by the finger, then the attendant shall pass the index and middle fingers as far upon the placenta as possible and press it gently downward and backward, while with the left hand the cord is made tense. When the placenta appears at the vulva the attendant shall grasp it with the fingers of one hand, and draw it gently upward and slowly turn it upon itself several times in order that the membranes may form a cord and not be torn away. When delivered the entire after-birth and any coagula are removed under the flexed leg of the woman and placed in an empty basin.

"*All strong traction* on the umbilical cord, or attempts to extract the placenta when high up by introducing a part or the whole hand, or to aid the efforts at extraction by straining, coughing, blowing in the hands, &c., are *very dangerous* and therefore are *forbidden*."—*Can. Lancet*.

Post-Partum Avulsion of Uterus with Recovery.

At a meeting of the London Obstetrical Society, Mr. J. HOPKINS WALKERS reported the following case (*Brit. Med. Journal*):

A patient, aged 22, was in her third confinement with only a midwife in attendance. This person, finding that the placenta did not come away after the birth of the child, pulled at the cord, which broke at its attachment. She then introduced her hand and tore away the whole of the uterus with the right ovary and Fallopian tube, portions of the round ligaments, the left

Fallopian tube and the ligament of the left ovary attached to it. Mr. W. saw her twenty-one hours after the accident, and found her under the influence and somewhat recovered from severe collapse. A large quantity of omentum protruded from the vulva, and in the upper part of the vagina was an enormous rent.

He ligatured and cut away the omentum, which was cold and badly bruised at the level of the vulva; the parts were washed with solution of permanganate of potash and a pad of salicylated wool was applied. The opiate was continued, catheterization ordered every eight hours, and the diet limited to milk and beef-tea. She did well until the fifth day, when she was seized with shivering; her temperature fell to 97.4°, and the pulse rose to 170. The vagina was irrigated with permanganate solution, and finding the vaginal fundus well closed around the omental stump, a solution of carbolic acid was afterwards used. Quinine in large and frequent doses was combined with the opiates, and the vagina was syringed every eight hours. On the twenty-eighth day she drove five miles to the hospital; three months after the accident the omental stump had frittered away, and the vaginal wound was perfectly cicatrized. Two and a-half years after the accident the patient was in perfect health and attending to her ordinary occupations. Mr. W. had found records of thirty-six cases of accidental removal of the puerperal uterus, fourteen of which recovered.—*Med. Med. Journal*.

Fissured Nipple.

℞. Ext. hydrast. canad. ℥ i.; ung. zinci. ox., fl. ℥ ii.; plumbi nitrat. grs. x. ℥. Ft. Ung.

DISEASES OF WOMEN.

Notes on Prolapsus Uteri.

From a clinical lecture by ALEX. J. C. SKENE, Prof. of Gynæcology, in the Long Island College Hospital, Brooklyn, N. Y.

The chief point in the past history of this case is, that years ago she began to suffer from pelvic tenesmus, which was much increased by standing or walking. In course of time she observed a tumor presenting at the vulva.

This tumor increased gradually until it attained the size which you here see. This mass hanging from the vulva is, as you observe, as large as a foetal head, and about the same shape. As the patient lies upon the back you observe that there is an opening in the upper side of the tumor, this I recognize as the external os uteri. I know it to be so from the structure of its mucous membrane and the character of the secretion. From this point above I can trace the cervix body and fundus of the uterus running directly downwards towards the table on which the patient rests. By grasping the mass above at the vulva I make the walls of the vagina tense, and in that way clearly show the outline of the uterus as it rests at a right angle to the axis of the vulva. The form of the organ as developed in this way, and the density of its structure, shows clearly that it is the uterus completely prolapsed and also retroverted.

In order to confirm this, I pass this straight probe into the cavity of the uterus, and you see that it goes directly downwards towards the table until it reaches the fundus uteri, which forms the lower portion of the mass or tumor.

The upper portion of the mass, *i. e.*, the parts that are just outside of the vulva, is made up of the bladder and

anterior wall of the rectum. This is proven by passing a sound into the bladder, which you see is directed downwards parallel to the patient's limbs, and by passing a sound into the rectum it curves round the sphincter ani muscle and protrudes downwards through the vulva.

You observe, then, that in this case the natural order of things is completely reversed; the uterus is below and the bladder and anterior wall of the rectum are lying above it.

This case is an exceptional one. Complete prolapsus of the uterus is often seen, but the uterus is generally found projecting directly downwards, the cervix being the most dependent and the body of the uterus lying between and parallel to the prolapsed vaginal walls. Here the uterus rests transversely to the vaginal walls.

The parts can be restored to their proper position in the pelvis by a little intelligent manipulation. The bladder is first pushed upwards, then the anterior rectal walls; thus by raising up the fundus uteri to bring the long axis of the uterus on a line with the axis of the pelvic outlet, the uterus is easily carried up to its normal position in the pelvis.

We have now an opportunity of examining the external parts, and you observe that contrary to what you might expect, the perinæum is not lacerated, or if it has been injured, it has been very slightly so. There is quite tissue enough in the perinæum, as shown by the distance from the anus to the posterior commissure. But this tissue, which occupies the place of the perinæal body, though sufficient in quantity, is deficient in quality. It is quite relaxed and wanting in contractile power. This loss of contractility must be due to one of two conditions: either paralysis

from over-stretching of the perinæal muscles (a temporary state), or else to degeneration and atrophy of the perinæal muscles—a permanent condition. You also notice that the perinæum, rectum, and labia project downwards far below their normal elevation. This is clearly demonstrated by placing one finger upon the pubic arch and the other upon the tip of the coccyx, and observing that all the parts project below these two points. Again, by placing the patient upon the side and flexing the thighs to a right angle with the trunk, you see that the anus and perinæum project downwards



until they are nearly flush with the nates. There is very little of the upward curving which forms the fissure between the folds of the nates. This downward elongation of the rectum and prolapsus of the perinæum are due to the loss of the levator ani and transverse perinei muscles, either from temporary paralysis or atrophy. From the fact that this prolapsus has existed for a long time, I presume that it is atrophy.

It is of great importance to settle the true condition of the muscles which are concerned in supporting the pelvic organs, because it is only by so doing

that we can determine our ability to cure the trouble.

If the loss of contractile power in these muscles is due to over distention alone, we may hope to relieve all this by replacing the prolapsed organs and keeping them in position until the muscles regain their original power. But if the muscles have undergone complete atrophy, then all our efforts to restore them will fail. To determine this point the patient should be placed in bed, the organs restored to their place and held there by means of the tampon for several days. We should then try the muscles to see if they will respond to stimulation. To do this the electric current should be used, which will excite contractions if there is any muscle left to act. There is another way of testing the muscles, and that is to prick the perinæum in the region of the anus, with a needle, this will excite the sphincter ani to contract, and the levator ani will draw the rectum upwards, and the perinæum also, if the muscles are not lost by atrophy. This last method is not so reliable as the electric test, but it is more conveniently employed. When there is no muscular response to our efforts there is no certainty of curing the case. The most that can be accomplished is to make the patient as comfortable as possible by mechanical supports, or uniting the vaginal walls, or both together.

This patient was placed under treatment in the hospital, but up to the time of this writing—three weeks from the time that she was first seen at the clinic—there was no disposition to stay in place manifested by the pelvic organs. All that is left to do, under the circumstances, is to unite the vaginal walls one to the other, leaving a space in the center through which the patient can menstruate. Should this fail to pre-

vent all tendencies to prolapsus, relief might be obtained by causing the patient to wear a perineal pad, attached to a band about the waist. This to be worn when the patient is upon her feet.

Kava Kava in Cystitis.

Dr. DUNSTONE (*Therap. Gazette*): A most obstinate case of cystitis, of several years' standing, has recently been under my care, and as it presents several points which may be of interest to the profession, I venture to make the following brief report of it. The inflammation seemed to affect the whole urinary tract, sometimes being more concentrated in the bladder, and, again, in the kidneys. The exciting cause was unquestionably gravel, for at times concretions as large as a grain of wheat would be passed. At such times the pain was, of course, excruciating. Exacerbations of gout were not infrequent, and the patient's rest was disturbed by frequent urination. After exhausting, in vain, all the remedies usually employed in such cases, I was quite discouraged, and began to cast about for something new. The first drug which I selected was kava kava, of which I gave a teaspoonful of the fluid extract (P. D. & Co.), in a teacupful of lukewarm water, morning and evening. The first dose caused a profuse perspiration and gave entire relief from pain. The stools, also, which had been previously of a clayey appearance, assumed their normal bilious color. In four days the urine became as natural as a child's, and was voided with scarcely a trace of uneasiness. The patient was, in addition to the kava kava, kept on an exclusively milk diet, and went on to complete recovery.

Sublimate Intoxication in Gynæcological and Obstetrical Practice.

In the Obstetrical and Gynæcological Association, WINTER presented specimens from Kgl. Univers. Frauenklinik, the patient having died from sublimate intoxication. She was brought into the hospital eclamptic. Delivery was completed by means of the forceps, which was followed by a profuse atonic hæmorrhage, which was treated by irrigating the uterus with four or five litres of hot water, containing one per cent. of sublimate. Immediately after the patient felt quite well; during the night pains set with tenesmus, copious diarrhœa, and in a short time the characteristic picture of sublimate intoxication had developed, which caused the patient's death on the third day. The post mortem examination showed the changes distinctly that are so marked in poisoning by mercury; especially marked was the diphtheritic condition of the mucous membrane of the intestinal tract. W. thinks the existing anæmia and nephritis was the cause of death. In another case reported by the same writer, the symptoms were briefly as follows: An injection of four or five litres of hot water was made into an atonic uterus, the water containing one per cent. corrosive sublimate. On the following day diarrhœa, having a decomposing foetid smell, set in, with albumin in the urine, severe pains, depressed temperature and a very frequent pulse. In ten days the patient made a complete recovery. In the clinic at Breslau, a one-per-cent. solution of sublimate is used for all intra-uterine and vaginal injections. Before and after each vaginal exploration, the vagina is disinfected with a liter of the above solution. After the delivery of every child, when the placenta is expelled, this same solution is employed to wash out the uterus on

prophylactic grounds. From the 18th of December, 1883, to April, 1884, 109 cases of confinement and abortions were treated in the above manner at the Breslau Polyclinic, and 95 from April to July, without the slightest symptom of intoxication. From April, 1883, to the present writing, 423 cases of confinement were recorded, and all treated on the above principle; out of this number only four presented symptoms of intoxication, but they soon disappeared when the sublimate was discontinued. The agent, when used for intra-uterine injections, becomes dangerous when a proper exit for the fluid is not established. On the other hand, it is just as important for the safety of the patient that the remedy be immediately suspended the moment symptoms of intoxication are noticed. It is absolutely necessary that the sublimate should be under the immediate control of the physician, and not given into the hands of a midwife, since they are not competent to recognize the first symptoms of intoxication, thereby losing some time that may be quite valuable to the patient.—*Therap. Gazette.*

Ignipuncture in Uterine Therapeutics

Is reviewed in a recent article by Dr. S. PROCHOWNICK. In cervical hypertrophy he makes four ignipunctures, two into the anterior and two into the posterior part of the vaginal portion; the punctures are through the stroma of the cervix to its mucosa. The favorable after effects are not immediate, but there is ultimately a reduction with no relapses, the improvement is permanent.—*Weekly Med. Review.*

The Abuse of Morphine in Menstrual Suffering.

Many ladies afflicted with uterine disease suffer but little inconvenience from the local changes throughout the

inter-menstrual period; hence attention is not directed to these conditions; medical advice is not sought and it is only in the intense suffering which precedes or accompanies the flow that the physician is called. All the usual hot applications, external and internal, have probably been tried; he must do something, and by an hypodermic injection, or a dose of morphine, quiets his patient and leaves her satisfied that he has succeeded. She is satisfied because her sufferings are relieved, and the physician is equally satisfied because he has effectually accomplished what he was summoned to do; he has relieved the pain; but this recurs month after month; the local disease, uterine or ovarian, is not improved; on the contrary, most probably grows slowly worse, so that the nervous system of the patient, often the stomach, suffers from the constantly increased doses of morphine.

Unfortunately the same treatment is but too often resorted to by the specialist, when, after months of treatment, the same menstrual suffering recurs. At first he uses it merely to afford temporary relief; but should the desired improvement not follow, after all possible means have been tried, he again and again administers the same dose, and the same unfortunate result to the patient follows. Digestion is impaired, the nervous system shattered, and the mind finally suffers. Those who object to the use of morphine or opium under the circumstances, give whiskey, and the unfortunate patients take glass after glass, until their sensibilities are dulled and the pain at least becomes bearable. The stomach often suffers so that the patient barely has time to rally when she must again pass through the same ordeal.

We would not for a moment deny the

propriety of relieving excessive suffering for the time being, or of administering the drug in those cases when it may have a curative effect, but it must be given only if the physician is for the first time confronted with a patient in the agony of the menstrual suffering, when he is unacquainted with the case, when he must act at once and other treatment is out of the question ; or if the menstrual period should appear, in consequence of a cold or over-exertion with unusual severity ; but when it has passed, treatment must be inaugurated so as to prevent the recurrence of such suffering.

I have, by chance, within the last month, met quite a number of such unfortunates who had been afflicted for years with uterine disease, whom treatment had not improved and who looked upon morphine or whiskey as the only possible relief from their agonizing menstrual pain. Their condition, I may say, is more desperate than that of the ordinary female sufferer, because the nervous system, weakened by the repeated administration of the drug, yields still more to the destructive influences of the local disorder.

Some relief should be possible to give by the reposition of a displaced uterus, by the dilatation of a contracted os, by the scarification of congested membranes, or whatever treatment the existing conditions may demand. I will not refer to the wonderful effects of cocaine, applied to the lining membranes and the cervix, or injected over the ovaries, because this offers temporary relief only. It is certainly possible by local, combined with constitutional treatment, to relieve menstrual suffering, and we would urge upon the profession that we must battle against this convenient habit of allaying such periodic suffering by the hypodermic syringe ; it must of

necessity, in the end, prove detrimental to the patient. As I have before stated, it is most common among those who suffer only at this time, and who suppose, on account of freedom from uterine symptoms during the inter-menstrual period, that local treatment is unnecessary, who do not consult the physician for such trouble and would not think of submitting to any treatment proposed, who merely summon the physician in their agony, demanding relief then and there.

Another class is made up of those who have vainly sought relief from local suffering and have once experienced the blessings of that total unconsciousness from the menstrual exacerbation which is afforded by the hypodermic syringe. The physician who first gives them such relief is blessed as a benefactor, the patient rejoices as if she were actually freed from the accompanying disease, and, once experienced, the same treatment is called for again and again. We thoughtlessly drift into the habit, when we can so conveniently relieve this intense and infallibly recurring suffering. It is by far easier for the physician to give a hypodermic injection, or prescribe a few morphine powders, than it is to strike the root of the evil, and when we have tried again and again in vain and looked helplessly about for means of relieving the distressing agony, we gladly grasp this one never failing remedy. The patient is satisfied, and we have accomplished our object. This scene recurs again and again ; the remedy is more frequently sought, is given in larger doses ; the nervous system and the entire constitution weaken under the combined influences of morphine and uterine disease, and we at length, when the damage is but too evident, become aware that something has to be done, that this state of

affairs can no longer continue.—*Ed. Weekly Med. Review.*

Retained Menses from Imperforate Hymen.

Dr. ROBERT WATTS related the case of a girl, seventeen years old, who had never had any menstrual discharge, but had suffered with symptoms of retention for only two months—abdominal pain and swelling, with a small separate swelling in the right iliac fossa, and distension of the perinæum. About a quart of dark liquid blood was drawn off with a large trocar, thorough evacuation being secured by making pressure on the abdomen. The liquid was not offensive. The puncture was then stretched wide open, and warm carbolized water was injected freely. The uterus contracted well, and the swelling in the right iliac region was found to be connected with the ovary. Iodoformed gauze was inserted in the vagina, and carbolized injections were afterward used. No unfavorable symptoms occurred, but there was now a tendency to agglutination of the walls of the vagina, in consequence, perhaps, of the over-distension to which the canal had been subjected.—*N. Y. Med. Journal.*

Accidental Puncture of the Gravid Uterus during Ovariectomy.

In the *Australian Medical Gazette* Mr. GEORGE FORTESCUE reports a successful case of Porro's operation, the details of which are, briefly, as follows: The patient was a young woman (unmarried) who had remarked for several months an enlargement of the lower part of the abdomen. When she was examined, a colloid cyst was diagnosticated, occupying the side of the right ovary. It was tapped, and a second smaller tumor was found on the left side. The patient had missed one menstrual period.

Four months afterward the operation was performed, there being no signs of pregnancy, save continued suppression of the menses. On opening the abdomen, a large cyst was first punctured and emptied, when a smaller tumor appeared at the wound and was likewise tapped, and a watery fluid was withdrawn. This was then found to be the gravid uterus. It was removed at once, and the patient made a speedy recovery.—*Ibid.*

The Internal Administration of Salt in Uterine Hæmorrhage.

BETZ, in the *Centralblatt für Gynäkologie*, commends this remedy in emergencies in which transfusion is impracticable for any reason. He dissolves five grammes of salt in half a litre of hot water, and gives three tablespoonfuls of the solution at intervals of five minutes. He cites a case in which this simple remedy proved efficacious, and states that its use is not accompanied by nausea.

A Case of Separation of the Symphysis Pubis.

Occurred in a sixteen-year-old girl, who was thrown from her horse whilst riding astride on a man's saddle, and dragged some distance. (*Australasian Medical Gazette.*) When seen, a little over six weeks after the accident, she was found to be suffering from bed-sores on the back and buttocks, with a sinus in the left groin passing close to the labium. There was a copious, thick and very fetid discharge from the vagina—gritty when rubbed between the fingers. There existed a separation of the pubic symphysis of one and a half inches. On introducing the finger into the vagina the roughened edges of the pubic articulation, denuded of cartilage, could be easily made out. The finger in the va-

gina could be plainly felt by the finger of the other hand, placed on the mons veneris, nothing but skin intervening between the two. The orifice of the urethra was dilated and in an altered position. Six months after the accident the finger, introduced into the vagina, encountered firm bands of tendinous substance, and uniting the pelvic articulation, part of the edges of the pubic articulation could still be felt, but smooth and covered by membrane. When first allowed to walk the girl felt "loose," and a feeling as though she was falling asunder. This only exists in a very slight degree later, and is quite counteracted by a firm band around the hips. Incontinence of urine from the first, and cessation of the menses.—*Weekly Med. Review.*

Uterine Catarrh.

Reported by THOS. A. ASHBY, M. D., (*Med. Med. Journal*). Uterine catarrh in its different manifestations is usually considered an opprobrium of gynecological practice. There is scarcely a condition which so taxes the ingenuity and patience of the practitioner as the inflammations which attack the endometrium of the uterine cavity and canal. The stubbornness with which many of these catarrhal conditions resist treatment is so well known that hopeless prognoses are frequently indulged in. In the treatment of chronic uterine catarrh many important details are overlooked, and the want of success is oftener the want of "infinite pains" upon the part of the practitioner than the result of inherent defects in the condition itself. Success may be purchased in many of these conditions if the physician and patient can be brought to work in accord. One secret of success is gentleness and patience in dealing with the inflamed endometrium. Gentleness

is necessary in making applications to the inflamed tissue. The rough use of instruments, of caustics, and of severe astringent applications, is a frequent cause of the worst forms of endometric inflammations. Patients have not infrequently presented themselves to the reporter with conditions of the endometrium sadly made worse by the rough usages practiced by physicians who undertook to cure the disease with violent caustic agents. Gentleness is then a prerequisite to success. By this term is implied the use of remedies that will induce a healthy condition of the inflamed tissue rather than a destruction of this tissue; the use of suitable instruments for handling and treating the inflamed organ, and the habit of gentle employment and rest upon the part of the patient herself. Patience upon the part of the physician is another essential qualification in the practitioner who wishes to succeed with this class of patients. As a class these patients are extremely annoying and dissatisfied individuals. To gain their confidence and assistance in the use of proper methods of treatment is often difficult. Yet that can usually be done if the medical attendant is not tired out in the effort. Having the patient under proper discipline and interested in the success of treatment, the practitioner should employ careful methods of applying remedial agents to the inflamed surfaces. The first and a most important rule to be observed in treating an inflamed uterine canal is to remove all secretions and thoroughly cleanse the mucous surfaces. This carefully done, the agent to be employed is next brought in proper contact with the tissues to which it is to be applied. The application having been made, glycerine or some soothing agent may be left in contact with the surfaces thus

treated. It is advisable that rest should be enjoyed for a short time after the application has been made. This is often impossible in dispensary or office practice. As a rule severe applications should not be made to the endometrium unless the patient can be placed for several hours or more upon a lounge or bed.

Mild forms of chronic catarrh respond much more kindly to the patient and gentle use of astringent applications, than where caustic agents are employed. It seems to the reporter that Churchill's tinct. of iodine is more to be relied on as an application than iodized-phenol, chromic acid, nitrate of silver, and other similar agents so often used by gynecologists. It may be necessary to vary these agents in a limited number of cases. Nitrate of silver, so highly praised by some authorities in chronic endometritis, may be used with advantage in a limited number of cases, though in the reporter's experience the strong solutions of sixty and eighty grains to the ounce of water are not indicated, the full efficacy of the drug being obtained by solutions of half this strength and less. Hot water vaginal injections are of undoubted value in all these forms of uterine catarrh. Unless the water is used as hot as can be borne and is brought in contact with the cervix by a long-continued and gentle stream, the benefit is not marked. Hot water is a great depletant agent, and this influence is soon shown when it is properly brought against a congested cervix. Various methods of administering the vaginal bath have been suggested, but there is much difficulty experienced by many females in the employment of a suitable method. Having once explained to the patient the reason for the use of hot water and the benefits to be expected from its local employment, she will in many instances

succeed in throwing the stream against the uterus, and will often persevere in the use of the syringe. In the tedious details of the hot vaginal douche many patients need close prompting and encouragement. The physician should make it a rule to ask the patient each visit if she uses the syringe, and require her to explain how she has employed it. Many patients will deceive their physician, and the best of them will neglect or omit the use of the vaginal douche unless closely watched and prompted in their duty in this respect.

The physician who fails to recognize the influence of uterine displacements as a cause of endometric inflammation will be unable to manage many of these obstinate catarrhal conditions. To remove a cause is often to effect a cure, but where cause and effect are so closely in affiliation, it taxes the most searching ingenuity to recognize to which order of conditions the one under consideration belongs. Uterine displacement must be relieved before the uterine catarrh will come under control, and having once relieved the catarrh, one step in the correction of the displacement has been reached. The numerous details for overcoming the many forms of displacement cannot be considered here. One suggestion is offered as worthy of careful repetition. It is this: In the use of mechanical supports to the uterus, employ the cotton tampon in such cases as require only a temporary supporter, and where they can be renewed conveniently as often as every alternate day. Absorbent cotton well moistened with carbolyzed glycerine, may be carefully packed in the vagina without making undue pressure upon the bladder or rectum. It offers a very convenient and easy support for a number of cases which do not require the use of a permanent pessary.

Menorrhagia and Metrorrhagia.

Dr. T. A. ASHLY (*Md. Med. Journal*): A number of cases of this trouble have come under observation at the Polyclinic. In searching for a cause in certain cases whose histories were clouded with doubt, an hypothesis has been assumed to account for the presence of this trouble. Cases whose histories could not explain the presence of profuse losses of blood from the usual conditions which give rise to excessive flows at and between the regular periods, give strength to the proposition that very early separation of the foetus is a very much more common event than is generally supposed, and is the true cause in many instances of profuse and irregular flows. The histories of such cases do not always point to impregnation, for the patients have not had time, in all instances, to become aware of this condition. In not a few cases the patient misses once or twice and the next flow comes on with severe pain and violent hemorrhage. The flow continues beyond the normal period to return once or twice during the month. The discharge thus established may come and go at short and irregular intervals for months before finally ceasing. In three cases, of which notes were kept, as few as three applications of Churchill's tinct. to the body of the uterus removed the villous growths from the endometrium and resulted in an early cure. It is believed that early separation of the foetus from the maternal tissues leaves, in not a few cases, a granular or villous condition of the endometrium, which may be removed without the use of the curette, but by mild astringent applications to their surfaces. In later separations these villi are more tenacious and require more heroic measures for their removal.

DISEASES OF CHILDREN.

The Post-Mortem Appearances in New-Born Children Where Death has been Caused by Suffocation.

Nobiling, in the *Arztliches Intelligenzblatt*, gives the following summary as the results of his investigations:

1. Extensive hemorrhages into the skin are caused by external violence—difficult labor, operative procedures and endeavors to resuscitate being excepted.

2. Hemorrhages into the muscles of the neck and along the great vessels always point to attempts at choking, with the same exception as in 1.

3. The following likewise always indicate external violence: Hemorrhages between the capsule and substance of the liver, or in the organ itself; tearing of the peritoneal covering or the parenchyma of the liver, spleen or kidneys (not a rare occurrence when restoration to life has been attempted). Furthermore, hemorrhages into the umbilical cord occur very rarely during labor or the performance of artificial respiration; they are caused, for the most part, by tearing or attempting to tear the cord.

4. Hemorrhages of great extent into the skin arise from difficult labor or external violence; hemorrhages into the lips, tongue, gums or mouth are always suspicious. Swelling of the lips—apart from its occurrence in the face presentations—is always to be considered an indication of violence; so should be considered hemorrhages into the external auditory canal or auricle.

5. Effusions of blood into the muscles, except the muscles of the heart, eye and tympanum, are always caused by external violence. The same exceptions are to be made here as in 1.

6. The substances, fluid or solid through which suffocation has ensued, are usually to be found in the respiratory and digestive tracts, in the drum of the ear and the Eustachian tubes—indeed almost always in all of them.

7. Blood in the larynx, trachea, bronchi and alveoli has been sucked in by inspiration; it has come from the nose of the child or the parturient canal. To a similar source is to be attributed blood found in the mouth, œsophagus or stomach.—*Centralblatt für Klin. Med.*—*Northwestern Lancet.*

Fatty Diarrhœa in Children.

In a paper on fatty diarrhœa of children, as understood by Demme and Biedert, Ischernov has found, from an examination as to the amount of fat contained in the fæces of healthy and fevered adults and children, that in fever at least 14 per cent. of the fatty food is absorbed. He then made analysis of the fæces of children under six years of age, and under different circumstances.

In the fæces of seven healthy children he found from 25 to 30 per cent. of fat; in that of two prematurely born children 47 to 57 per cent.; in four children with dyspepsia, 37.6 per cent. (normal state, 26.3), 43.6 (normal 27), 43.5 (in this case the mother's milk contained only 1.5 per cent. of fat), and 62.2; examinations were also made in fourteen other cases, in which the children suffered from different diseases, and in whom there were symptoms of intestinal irritation.

In a case of erysipelas the fat amounted to 52.2 per cent.; catarrhal pneumonia, 51.4 per cent. (during convalescence, 42 per cent.), 51.7 (convalescence, 33.1) and 60.9 (convalescence, 55.2); in a case of a large abscess, 67 per cent.

of fat, which fell to 48.3 when the abscess was opened and improvement began. In a case of icterus, with enlargement of the liver and spleen and severe diarrhœa, there was 75.3 per cent. of fat.

Ischernov concludes there is no such a disease as fatty diarrhœa, but that it is a symptom found in various and widely different diseases.—*Centralbl. für Klin. Med.; Med. News.*

Bismuth Injections in Dysentery.

Dr. F. E. WAXHAM (*Archives of Pediatrics, Am. Practitioner*) says this disease may be modified and often quickly abridged by this means. From ten to twenty grs. are injected with mucilage and water after each evacuation, and if not sufficient alone to control the frequent stools, a little laudanum is added. A child suffering from a severe attack, with rectal prolapse at each passage, was almost immediately relieved, the passages being entirely changed within twenty-four hours; the tenesmus and frequent desire ceasing, and the prolapse not recurring after the second or third administration. This is only one of many cases where this remedy has been used with gratifying results. In very severe cases opium in some form, preferably tincture, may be added with benefit.—*Med. Med. Journal.*

In Teething of Infants.

Dr. JAMES ERWIN BAKER, of Lancaster, Pa., praises cocaine for its quieting effect in the peevishness of teething infants, and for its value in procuring sleep in such cases not only for the baby, but for its parents as well. He writes that he used the drug in the case of his own child, who was cutting his first teeth, and was very restless and irritable. A four per cent. solution was

rubbed on the mucous membrane firmly by means of absorbent cotton. "After two applications, two minutes apart, the child ceased screaming, went to sleep within five minutes, and slept for three hours uninterruptedly." During the following day two applications were made with the result of quieting the child almost instantly, and without inducing any bad effects. A certain stiffness of the tongue was noticed after the application, due probably to the anæsthetic effect of the drug. A whitening of the mucous membrane, caused by the capillary contraction, was also observed. Dr. Baker adds that the results obtained in this case suggest the employment of cocaine in the diarrhœa due to the reflex irritation from teething, and he proposes to try it at the earliest opportunity.—*Med. Record.*

Pertussis.

To cut short the paroxysm in whooping-cough, Prof. DAcOSTA recommends the inhalation of: *R.* Sodii bromid., gr. xx.; ext. belladonnæ fluidi, gtt. ij. *M.* Sig.—The spray to be inhaled just prior to occurrence of the paroxysm. In the interval, quinine should be pushed up to the point of tolerance.

Epistaxis in Children.

DR. RENDU, in a clinical lecture on this subject mentions two cases then under treatment in the Hospital des Enfants-Malades.

The first case is that of a young boy in whom the loss of the blood was great, and continued for three days. No local cause could be discovered, and the real cause lay in a dilated heart, the result of mitral incompetence following upon acute rheumatism. A mild attack of rheumatism, occurring while the lad was under treatment, confirmed the diagnosis.

In the second case the epistaxis lasted four days and was attended with some rise of temperature. Shortly after admission to the hospital the flow of blood ceased simultaneously with the appearance of the characteristic eruption of measles.

After stating that epistaxis is very rare in children under two years of age, and becomes more and more common as puberty is approached, Dr. Rendu goes on to discuss its causes—

1. Inflammatory conditions of nasal mucous membrane—rare, unless there be violent efforts to blow the nose.

2. Polypus: (*a*) Mucous, rarely causing epistaxis. (*b*) Fibrous, a common cause.

3. Foreign bodies, by producing ceration, often after the body has been for a long time lodged in the nose.

4. Mechanical violence, especially the introduction of the child's own finger.

5. Whooping cough.

6. Heart disease with hypertrophy; the immediate cause being often sudden variation of temperature or atmospheric pressure.

7. Eruptive fevers. Common in measles before the appearance of the rash, very rare during the period of eruption, again occurring as a "critical" discharge as the rash begins to fade.

In scarlatina only occurring in the hæmorrhagic variety, or during post-scarlatinal nephritis.

Common in smallpox in children as in adults.

In erysipelas, common, if the nose be involved.

In enteric fever only in one-fifth or one-sixth of the cases and then usually only very slight (Rillet et Barthéz).

In diphtheria (*a*) when the nose is involved, and often (*b*) independently of local cause.

8. Diseases in which the blood is

much altered, *e. g.*, scurvy, purpura, ecthyma. In purpura it is of grave import, and is not in proportion to the cutaneous affection.

9. Diseases of liver. Rare since cirrhosis is rare in children. It occurs in the cirrhosis of heart disease, and at times accompanies severe jaundice.

10. Acute renal disease.

11. Spontaneous epistaxis occurring
(a) in girls before the catamenia are established, and now and then alternating with the menstrual flow; and in boys of the same age of gouty parentage, who subsequently suffer from hæmorrhoids.
(b) In gouty and rheumatic children; often brought on by some very trifling cause, such as over-fatigue or dyspepsia.
(c) As a result of masturbation.

According to Dr. Rendu epistaxis accompanied by general malaise, but without fever, is generally due to some arthritic diathesis; whereas that which is attended by rise of temperature usually ushers in some eruptive fever or gastric disturbance.

In the commencement and at the crisis of fevers epistaxis often acts very beneficially, hence the value of leeches at these times. In scrofulous subjects it is rare, except as the result of some local affection. — *Manchester Medical Chronicle*. — *Obstetric Gazette*.

OBSTETRICS.

Influence of *Cimicifuga Racemosa* upon Parturition.

In a paper with the above title, read before the Chicago Obstetrical Society, Dr. J. SUYDAM KNOX reaches the following conclusions:

1. By the use of the black cohosh the duration of the first and second stages of labor is diminished at least one-half.

2. *Cimicifuga* has a positive sedative effect upon the parturient woman, quieting reflex irritability, nausea, pruritus, and insomnia, so common in the last six weeks of pregnancy; it always renders them less distressing, and they often disappear under its administration.

3. *Cimicifuga* has a positive antispasmodic effect upon the parturient woman. The neuralgic cramps and irregular pains of the first stage of labor are ameliorated, and often altogether abolished. In fact, during the first indiscriminate use of the drug in all cases, I had the mortification, with a few women, of terminating the labor so precipitately, and without prodromic symptoms, as to be unable to reach the bedside before the birth.

4. *Cimicifuga* relaxes uterine muscular fibre, and the soft parts of the parturient canal, by controlling muscular irritability, thus facilitating labor and diminishing risks of laceration.

5. *Cimicifuga* increases the energy and rhythm of the pains in the second stage of labor.

6. *Cimicifuga*, like ergot, maintains a better contraction of the uterus after delivery.

His method of administration has been to give fifteen minims of the fluid extract of *cimicifuga* in compound syrup of sarsaparilla each night for four weeks before the expected confinement.

[The views of other obstetricians are not wholly in accord with those of Dr. Knox.] J.

The Treatment of Mastitis by Bandaging and Rest.

Dr. PHILANDER A. HARRIS thus concludes a paper on this subject in the *Amer. Jour. of Obstetrics*.

"From my experience in the management of the puerperal and nursing

breast, I would form the following conclusions :

"1. That the breasts soon after delivery are strongly disposed to secrete milk, and will usually continue to do so for a few days, even if they be not nursed. If no attempt be then made to nurse or withdraw the milk, the secretion rapidly diminishes, and they return to their normal size and condition of inactivity.

"2. That as a rule (to which there are probably few, if any, exceptions), the retained secretion does not undergo changes which convert it into an irritant fluid, but instead, it remains innocuous to the walls of the ducts and acini which contain it, and under favorable conditions is finally absorbed without trouble or embarrassment to either the normal or inflamed adjacent tissues.

"3. That, as a rule, the secretion of milk continues only while the natural stimulus, as nursing or other means of emptying the breast, continues to be employed. That the secretion, either in the normal or inflammatory condition, begins to abate when such stimulus is withdrawn, and will entirely cease after a week or two.

"4. That an abundant secretion of milk which has recently and entirely ceased as the result of a complete withdrawal of stimulus, may be again recalled upon the reapplication of the child.

"5. That the presence of a decided inflammatory movement in the breast greatly diminishes secretion in the gland.

"6. That the sympathetic relation between the two breasts is almost, if not wholly, a sensory one. That neither the function of secretion nor the condition of the circulation in one breast is appreciably and directly affected by either physiological or pathological

processes which may be going on in the other.

"Inflammation of the breast should be regarded as a progressive rather than a self-limited disease. It is attended by a train of pathological changes which become more severe and complicated until the conditions or circumstances which have produced them and which favor their continuance are removed.

"The inflamed breast should be supported in a well-applied bandage, and no attempt made to nurse or withdraw the secretion until the entire subsidence of the inflammatory movement.

"Sore and fissured nipples often produce inflammation of the breast. If, therefore, in any particular case we have reason to believe that the lesion will soon lead to the development of mastitis, or should it appear that a cure cannot be effected during the continuance of nursing, we shall be justified in the entire suspension of suckling through the affected part, until a cure of the local trouble is established.

"The well-applied bandage exerts a salutary influence on the morbid conditions which affect the nursing breast, and it is also the most grateful measure of treatment."—*Med. & Surg. Reporter.*

Acute Pancreatitis in Childbed.

Dr. R. HAIDLEN relates the case of a primipara, thirty-three years of age, who had suffered during pregnancy from gastric disturbances and headache, and during the latter part of this period from severe colic and slight symptoms of peritoneal irritation. Owing to weak labor pains delivery was effected with the forceps. During the following three weeks the progress of the case was normal, but at the end of this time there were occasional hemorrhages, and several attacks of pain in the gastric region. The last of these was very severe.

and accompanied by vomiting. There was no fever, the pulse was 100 and regular. There was great tenderness on pressure over the pit of the stomach. The intellect was unimpaired. The urine was voided normally, but in small quantities; the bowels did not move. Finally, the pain in the epigastrium became very severe, meteorism set in, the extremities became cold, and the patient died. At the autopsy the pancreas was found to be enlarged in all its dimensions and of a brownish-red congestive color, the result of acute inflammation. There was no marked peritonitis, and the other organs were normal.—*Schmidt's Jahrbucher*.—*Med. Record*.

The "Uncontrollable" Vomiting of Pregnancy.

A paper on the above subject by Dr. GRAILLY HEWITT, read before the Obstetrical Society of London, is summarized in the *Med. Times* (November 22). Its conclusions are based upon two series of cases in which the condition of the body and cervix were recorded, and are as follows:

(1) That the cases in which the disease is due to some other organ than the uterus, are so few in number (only one in the series of 32) that they may be almost excluded from consideration. (2) That in the large majority of cases the disease presents itself during the first half of pregnancy. (3) That the evidence points to interference with the normal expansion and growth of the gravid uterus as the condition of the production of this dangerous affection, and that this is most frequently brought about by or in connection with retention of the bulk of the uterus in the bony pelvis, in 88 per cent. the uterus being anteflexed or anteverted, and in 12 per cent. in a state of retroversion, the other conditions met with

being hardness, resistance, or unusual rigidity of the os and tissues of the cervix. (4) There appear to be two factors to be considered capable of interfering with the expansion of the uterus (a) incarceration with flexion or version; (b) undue hardness, and rigidity of os and cervix. These may be conjoined in a given case. It appears to be borne out by the facts recorded that the incarceration is the more important of the two factors, as a rule at least. The facts appear to point to the occurrence of embarrassment in the expansion of the uterus very early in the pregnancy, such as might be expected to be occasioned by a previously flexed state of the uterus or by a congested indurated state of the cervix, or by the two conditions combined. As the pregnancy advances, the congestion and swelling are intensified, and the resistance to expansion thus increased. It appears probable that the particular cause of the sickness observed, is the compression of the nerves situated in the tissues which are especially exposed to compression, namely, those around the cervix uteri, and especially those near the internal os. Copeman's success in the treatment of severe sickness by dilating the internal os is evidence in this direction. The importance of the flexion element has been denied, one principal objection being that sickness is not always present when the uterus is flexed. But the case is the same in the non-gravid uterus; severe sickness is not seldom due to flexion of the non-gravid uterus, while flexions are observed without sickness. Corroboration of the author's views are contained in Gehrung's recent paper. As a rule, severe sickness is limited to the first half of pregnancy, in a very few cases it persists longer; in these rare cases, the cause may be rigidity of the tissues round the internal

os, persisting to a late period. As regards treatment, the first indication is to secure the normal upward movement of the fundus uteri, to relieve the incarceration of the uterus, when present, if that be possible, and to prevent its occurrence by a properly arranged method of treatment. Absolute rest in the supine position, if anteversion be present, or on the face or side, if retroversion be present, and the use of the knee-elbow position will be required. These measures suffice in many cases. If the uterus be fixed, gentle continuous pressure must be applied internally by the fingers, or by an air-ball, and the position maintained by a suitable pessary. These measures failing, Copeman's procedure of dilating the cervix should be employed. Artificial abortion will, it is believed, be rendered unnecessary if the less severe measures are applied early.—*Boston Med. Journal.*

Operation for Vesico-Vaginal Fistula.

J. H. CARSTENS, M. D.—Mrs. B., aged 35. Had six children. Lost her husband in November, 1884. L. O. A. position. Large child. Woman had fretted much after her husband's death, and was at the time of parturition in a delicate state of general health, much emaciated and enfeebled.

Pains rather indifferent; head remained in the excavation for over three hours before recourse was taken to the forceps. Instrumental delivery very easy, no rupture of perinæum.

No trouble in micturition for first two days, on third day patient complained of watery discharges and upon inquiry stated, that she had not voided urine for over twelve hours. On passing the catheter, bladder was found to be empty. This aroused suspicion and on examination a fistula was detected in anterior

vaginal wall, about one-fourth inch anterior and below the cervix uteri and a little less than one-half inch in diameter.

No pain whatever was complained of. As it is very often the case, so here, patient and friends laid the blame to the consulting physician and the forceps, although the known skill of Dr. HOKE absolutely excludes any such a supposition, and the cause of the trouble had to be looked for in the protracted course of the second stage, long continued pressure of the foetal head and consequent sloughing of the soft parts at the seat of injury.

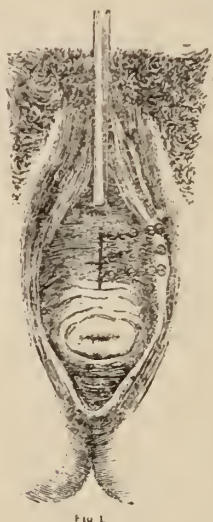
Patient was removed to Harper Hospital and at once put upon supporting treatment up to the day of the operation.

Operation.—The patient being placed upon a table about two by four feet, properly covered with blankets, was brought under the influence of chloroform by Dr. GAILEY, laid upon her left side, thighs bent at right angles with the pelvis, the left arm behind her back and her chest and sternum brought to bear upon the table. Next, SIMS' speculum was introduced by an assistant and the posterior vaginal wall gently drawn back by it, while a second assistant held in position a silver catheter, previously introduced and with his right hand elevated the right side of the nates. Everything being ready, the required instruments close at hand, PROFESSOR CARSTENS proceeded to the first step of the operation. With a strong tenaculum catching hold of the remotest edge of the fistula, he commenced to pare its walls with a long-handled bistoury from the vaginal mucous membrane towards the bladder. Having succeeded in one place, another part of the fistulous edge was grasped and the process of paring repeated, until a perfect circle of healthy tissue was obtain-

ed, about eight to nine lines in diameter at the vaginal wall and evenly tapering off towards the bladder. The danger of wounding the very vascular lining membrane of the bladder was skillfully avoided and consequently the amount of hemorrhage was only very slight and easily controlled by sponging.

The first step now being successfully completed, the operator proceeded to the passing of the sutures.

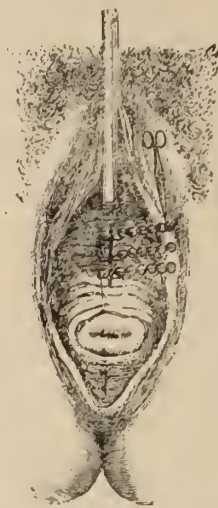
Annealed silver wire was the material employed. Slightly curved, round needles, about three-fourths of an inch in length were used, and in all three sutures passed. These were, after carefully approximating the pared edges, tightly secured by perforated shot in the following manner: The operator drew the ends of the wires through the shot—five in number for each suture—and after bringing them with gentle force close up to the edge of the wound, compressed, with an instrument con-



structed for the purpose, only the last one of the shots slipped on, in this manner keeping the whole string well secured.

This ingenious method—also employed by PROF. CARSTENS in operating for

lacerated perinæum—allows of an easy removal of the sutures after they have



done their service, and as it does away with the often impracticable, in certain locations, even dangerous twisting of the wire, has an apparent advantage over the old method. All that is necessary is to cut the wire between the fourth and fifth shot; the others can be pulled off and the long ends of the wire grasped and removed.

The silver catheter used during the operation was now replaced by a stationary "Sims' sigmoid" catheter,—an opiate administered and the patient put to bed.—*Med. Age.*

The Knee-Chest Position in Version.

Dr. E. F. WELLS, of Minster, O., calls attention to the advantage of the knee-chest position in this operation, and illustrates his point by a case. J.

DISEASES OF WOMEN.

Hydrocele in the Female.

Dr. OSBORNE (*London Lancet*) reports two highly interesting and rare cases of hydrocele in the female; one of the patients, a lady, æt. 30, married, came under his charge to be treated for an enlargement in the right thigh, which she first took notice of seven or eight weeks previous; it was not larger than a hen's egg, resembling a femoral hernia, was soft, but showed no impulse on coughing; there was some fluctuation, though the mass was not transparent. A satisfactory diagnosis was not possible; nevertheless, the tumor was tapped, and a clear, yellow liquid withdrawn. A femoral truss was applied, and the patient sent home with injunctions to remain in bed for a week. Three weeks later she again appeared, and the swelling presented the self same features. Tapping was again deemed necessary; the walls of the cyst were punctured and, after the liquid had been withdrawn, the sac was carefully manipulated and tincture of iodine injected. An ice bag was applied for three days; at the end of the third day, slight inflammatory swelling was observed, which subsided in the course of a few days. The femoral truss was again ordered. A month or two later, the truss was discontinued, as the swelling had entirely disappeared.

The second patient, aged 35, had noticed a lump in her groin, which had gradually increased for seven years; this resembled a large pear in shape, with the smaller end pointing downward towards the labia; it was transparent by transmitted light, but showed no impulse on coughing. Upon tapping, more than a pint of canary-colored fluid was evacuated, and the walls of the cyst were treated as in the preceding case. A

truss was ordered and the patient told to remain in bed for a week or more. On getting up, however, and going about the house, the swelling reappeared; a month later, the cyst was again tapped and a small quantity of Morten's solution was injected. Two weeks later she complained of much pain and, upon rising one morning, she noticed that the bed linen and underwear were soiled by the liquid which had oozed from the swelling, now much increased. Again it was tapped, tincture of iodine injected, and ice bags applied. After a week, pressure was resorted to and kept up constantly for several months; at the end of this time, the patient was discharged completely relieved from her trouble.

Diverticulum in Female Urethra.

Prof. SANTESSON, of Stockholm, has described, in the *Nordiskt Mediciniskt Arkiv*, a case in which a pouched condition of the urethra caused severe symptoms. The patient was a middle aged widow, who, after a confinement, suffered from difficulty in micturition. At the end of twelve years this symptom had become very troublesome, and a large swelling filled the vagina whenever she passed urine. A catheter could be introduced up the urethra, and through a circular orifice into the swelling, and then urine mixed with mucus escaped as the swelling collapsed. When, on the other hand, the swelling was pressed firmly by the finger introduced into the vagina, it emptied into the bladder, this manipulation always causing great pain. If the patient were prevented from voluntary micturition, for which she felt a desire almost every hour of the day, the bladder emptied itself by a painful, spasmodic contraction. After cauterization of the urethra, and the removal of three small vascular growths, the patient

enjoyed comparative comfort for two years, when the sudden, involuntary action of the bladder became very frequent. The vaginal wall of the diverticulum was destroyed by caustics. After the separation of the eschar, and healing of the wound, the circumference of the diverticulum was reduced by half. For two years the patient remained free from incontinence of urine and frequent desire to micturate; then these distressing symptoms recurred. The remainder of the vaginal wall of the diverticulum, including the cicatrix, was excised, and the edges of the wound united by sutures. The wound partially sloughed, and did not heal completely for five weeks. The diverticulum was now reduced to a mere digital depression, and relief remained complete for four years, when the diverticulum again increased in size, and all the bad symptoms returned. The patient suffered from nephritis, cystitis, and dilatation of the urethra, the walls of which were also œdematous. A syphilitic rash was discovered on the trunk and extremities. She was, in fact, in a state quite unfit for any operation, and was sent to an infirmary, where she died two years later, having suffered for about twenty-two years from the diverticulum, excepting during the intervals of relief due to the operations. Dr. Santesson felt inclined to attribute the origin of the diverticulum in this case to damage of the urethral walls during protracted labor.—*British Medical Journal*.—*Jour. Amer. Med. Assoc.*

A New Theory of the Menstrual Process.

The following are the salient points in the interesting work of Dr. LOWENTHAL, which was recently published in Leipzig (*Allgemeine Med. Central Zeitung*): 1. The periodical flow of blood

from the genital organs of the female is not the consequence of the (for the most part coincident) rupture of a Graafian follicle, but the result of the shedding of the mucous membrane lining the uterus, which is independent of the rupture of the vesicle, and takes place before it. 2. The formation of the menstrual decidua is due to the embedding of the very last ovum set free in an unfructified condition from the ovary. 3. It at once transforms itself into the decidua of pregnancy, if the embedded ovum becomes fructified, and it is shed in consequence of the death of the ovum, if this remains unimpregnated. 4. During menstruation the bursting of the vesicle and the menstrual bleeding have no other causal relation to one another than is to be found in the causes and conditions simultaneously present affording a favorable opportunity for the bursting of a matured follicle. 5. The coincidence of the bursting of the vesicle and the flow of blood is consequently no necessary one, and either can appear independently of the other. A vesicle can burst without there being present at the time a menstrual decidua. The secondary consequence of the escaped ovum, *i. e.*, the menstrual bleeding, can appear without a new vesicle bursting at the same time. 6. The periodicity of the menstrual flow is dependent upon the vitality which the ovum is capable of maintaining outside of the vesicle when embedded and remaining unfructified. The general or individual variations in periodicity depend upon the shortening of, or entire want of this extravascular life; whether it be idiopathic or caused by intervening influences. 7. For impregnation to take place an ovum usually freed from the vesicle at the time of the last menstruation must be always present, normally

in the uterus, in abnormal cases somewhere outside of it.

Ovariectomy—Removal of Gas from Intestines.

Dr. W. WANDS (*Weekly Med. Review*): In the case of double ovariectomy reported by Dr. E. C. Dudley, in the *Medical Review*, considerable importance was attached to the treatment of the intestines for the removal of gas. I desire through the *Medical Review* to call the attention of gynecologists and operators in abdominal surgery to the remedy used for that purpose by Charles D. Meigs. In speaking of it he says: "I have used it in these cases and ever shall, and if a man may venture to speak of an experience of fifty years, I am willing to say that I heartily recommend it; and if it were not unprofessional to do so, I would write over it, *Probatum est.*" The formula is Dr. Brown's and is as follows: $\mathcal{R}$. Mannæ, $\mathfrak{z}$ j.; anisi semæ, $\mathfrak{z}$ j.; aquæ bulliant, $\mathfrak{z}$ viij. M. and rest for half an hour; strain and add, carb. magnesiæ, $\mathfrak{z}$ iv. S. Wine glass every three hours until it moves the bowels.

Solid Tumor of the Ovary. Uterine Myoma. Abdominal Section Performed by Mr. Lawson Tait. Recovery.

The patient was thirty-one years of age, unmarried, and had enjoyed good health until she reached her seventeenth year, when she was sent to Bellevue Hospital, New York, on account of an attack of pneumonia. She remained in the hospital three months. After leaving the hospital the menstruation was irregular and profuse. She was able to do housework, and did not seek medical advice until about eight years afterwards, when she was again admitted to Bellevue Hospital. At this time fre-

quent hemorrhages from the vagina had prostrated her. In the winter of 1881 the patient was in the Albany Hospital, and the principal symptoms at the time of admission were severe abdominal pain and hemorrhage.

Examination upon the day of the operation, September 10, 1884, showed that she had a large bilobed tumor, the parts of which were of unequal size. The larger mass was thought to be a cystic ovary, and the smaller mass on the left a myoma of the uterus—possibly two large myomata. Mr. Tait said that he had no hesitation in operating upon this case, although he had some doubts as to the propriety of conducting such operations in a crowded room. He had never before operated in the presence of more than a dozen persons, and should this patient do poorly, he would be inclined to lay it to the atmosphere in which the operation was performed.

Mr. Tait here began the operation at 4.42 P. M., assisted by Drs. Van der Veer and Boyd. After opening the abdominal cavity, he announced that the case was one of solid ovarian tumor and of uterine myoma, and proceeded to remove both, with the uterus. The operation was finished at 5.24 P. M., making the time from the first incision to the conclusion of stitching up the wound, forty-two minutes. The pedicle was treated by Tait's circular wire-clamp. The wound was dressed with simple Gamgee pads made of absorbent cotton covered with carbolized gauze. Two of these were placed over the wound and held in place by a cotton bandage passed around the patient's waist.

After the operation the patient's condition was favorable until about 10 P. M., when there was a severe hemorrhage from the vagina, apparently. About this time a catheter was intro-

duced, and the urine drawn from the bladder was found to be mixed with blood. Through the prompt and efficient measures adopted by the house physicians, Drs. Flynn and Melick, the patient rallied, although when they began the use of the hypodermic injections of whiskey her pulse was imperceptible, and the respirations about forty-two. At 4.30 A. M., September 11, 1884, the patient desired to empty the bladder; a catheter was introduced, but no urine was found. At 10 A. M., September 11, 1884, the patient was seen by Mr. Tait and Dr. Boyd. After reading the house physician's report, Mr. Tait concluded that a portion of the bladder had been constricted by the clamp. A careful examination of the pedicle and abdominal wound revealed a satisfactory condition of affairs. Examination of the vulva revealed the fact that blood was slowly flowing from the urethra, and a catheter passed into the bladder came in contact with clots.

Mr. Tait remarked that the patient's recovery would be retarded by the accident, as a fistula of the bladder would result, but that even with this complication, she would get well. He said that the accident had occurred in two of his operations in England. The bladder was washed out twice a day with a weak solution of carbolic acid, and a soft catheter was allowed to remain in the urethra.

After a few days a solution of boracic acid was substituted for the carbolic acid.

On the fourth day after the operation a bloody fluid of a decided ammoniacal odor was noticed oozing near the pedicle. There was no tympanites at any time. The stitches were removed on the sixth and seventh days after the operation, and the wound was found to be perfectly healed as far as the clamp.

The only dressing used was that of absorbent cotton and carbolized gauze. The clamp was removed on the eleventh day. Long before this time the urine flowed freely through the opening in the abdominal wall. As the remnants of the pedicle were removed, a large funnel-shaped cavity came into view, at the bottom of which was the fistula.

The temperature reached 102° F. on the day after the operation; also on the third, fourth and fifth days. On the fourteenth day 103° F. was recorded. The pulse was above 100 for the seven days succeeding the operation. On November 30, 1884, the fistula was entirely healed, and the patient had perfect control of the bladder. Examination of the abdomen revealed a firm cicatrix extending from near the umbilicus to the symphysis pubis, and no trace of the fistula could be discovered.

Oophorectomy as a Remedy Against Nervous and Mental Suffering.

Before the late International Medical Congress, Prof. HAGER (Freidburg) made some observations on castrations in general, and particularly on its indications. He treated of the pathological and anatomical changes of the sexual organ for which castration should be proposed, and the neuroses in connection with these changes; and next pointed out the causality between the disease-process of the sexual organ and the neuroses, and examined the question under what conditions should castration be performed. The neuroses upon which the pathological processes of the sexual organ are dependent, were chiefly considered. He gave a formula of the indications, statistics on the results, and the reasons by which rightly to estimate the indication for operation. A neurosis without any material change

of the sexual organ might exist. Was this an indication for castration? He concluded by referring to the connection between gynæcology and neuropathology.

The Effects of the Curette.

DR. DUERELIUS contributes to the *Zeitschrift für Geburtshilfe und Gynäkologie*, Band X, Heft 1, the result of an investigation into this subject. The use of the curette in cases of endometritis, menorrhagia, etc., has been warmly advocated by Dr. A. Martin and others. It has been asserted by those who do not look with favor upon the instrument—(1) that it is impossible to detach with the curette the whole of the uterine mucous membrane or to make a diagnosis as to the nature of the disease present from examination of the bits scraped away by the curette; (2) That the relief to symptoms which follows the use of the curette is not permanent; (3) That the detachment by scraping of the lining membrane of the uterus prevents future pregnancy. Dr. Durelius, in this paper, gives the result of an inquiry into these objections: (1) From experiments on the dead body, in which the uterine mucous membrane was scraped in exactly the same way as this operation is performed on the living, and the uterus then taken out and examined, he finds that it is possible with the curette to entirely denude the uterine muscular tissue of its mucous membrane, except in the immediate neighborhood of the orifices of the tubes. As to diagnosis, in five cases in which malignant disease was diagnosed, and in four others in which endometritis adenomatosa was concluded to be present, from examination of the fragments detached by the curette, the uterus was extirpated, and the diagnosis was in each case confirm-

ed. (2) The second objection he can answer less definitely; all he can say is that patients have, after treatment by the curette and caustic, been sent out free from symptoms, been told to come back if the symptoms returned, and have not done so. (3) With regard to the third objection, he has been able to find no less than sixty cases of pregnancy occurring after scraping out of the uterine cavity. In eleven of these, the curette was used to remove pieces remaining after abortion; in the other forty-nine for endometritis, thirty-two of these having been pregnant before, seventeen not. Out of the sixty pregnancies only six ended in abortion. Dr. Durelius believes that the curette, so far from causing sterility, sometimes cures it.—*Medical Times*.

Muriate of Cocaine in Gynecology.

Dr. GEO. J. ENGELMAN, (*Weekly Med. Review*.)—In an aggravated case of vomiting from pregnancy due to an eroded cervix, we have succeeded well with the cocaine treatment. The patient, a young married lady, had been suffering severely and constantly from nausea and vomiting with distressing backache. Such local remedies as we have invariably found successful when no local cause existed, had failed. After an examination had been acceded to, a large circular erosion was discovered and the rubbing of the sensitive raw surface upon the posterior vaginal wall caused great suffering, backache, nausea and vomiting. Internal remedies of course were withdrawn and a few drops of a four per cent. solution of cocaine applied with a cotton pledget to the eroded surface. The backache immediately ceased and the vomiting stopped, though the nausea continued; and though these distressing conditions

again returned, they appeared in a milder form and are slowly yielding, as the erosion is healing under these applications of cocaine made every second day. A small pledget of cotton saturated with a few drops of the solution is left in the external os after the erosion has been painted with the solution; the surface is powdered with iodoform and a tampon of salicilated cotton is introduced.

In dysmenorrhea we have, as before stated, had the happiest results by applying a few drops of a four per cent. solution upon a pledget of cotton to the cervical canal as far as the internal os and even into the uterine cavity, after cleansing the surface, thus relieving backache, bearing down pains and uterine suffering.

From Dr. Forrest, of Charleston, S. C., we find a statement in the Medical News, that he has employed an hypodermic injection of from three to five minims of a four per cent. solution over the region of the ovary; this was in an aggravated case; to give the doctor's own words, "The deformity of the uterus has been rectified by the treatment, but the pain during the menstrual period is still as agonizing as ever; the most acute and intolerable anguish is over the left inguinal region and is accompanied by wind colic that causes the sufferer to writhe in agony; nausea and vomiting add to her distress and she seems at times ready to go out of her mind with suffering. While still hoping to effect a permanent cure of this condition by proper treatment, temporary relief by the administration of morphia is all that I have hitherto been able to afford her. The remedy is almost as bad as the disease; excites the nervous system, banishes sleep, increases the prostration, etc." Almost immediately after each injection of the cocaine, the pain in the

inguinal region ceased to be felt, and the nausea wind colic was relieved, and instead of the nervous excitement and wakefulness, a soothing effect inclining to sleep was experienced. Five minims of a four per cent. solution were sufficient to afford a complete relief for five or six hours and comparative immunity for a much longer period. He adds: "While however, the drug acted thus admirably, both locally and generally, it had no effect apparently upon the bearing down pains and pain in the back, but only upon the local pains in the neighborhood of the spot where it was injected. It was also noticed that while it relieved the nausea and vomiting which were of a reflex origin, it caused slight nausea itself, but this was only temporary."

It appears by this that if we combine the method of Dr. Forrest with the application before mentioned we may hope to completely relieve, in many instances at least, the pains of dysmenorrhea, that is by applying the solution to the cervix and the mucous membrane of the canal and also injecting the solution over the site of greatest pain. We have observed that in our own case in which the application was made to the lining membrane, the local pain was relieved, whilst the insomnia, the nervous excitement to a certain extent continued; and Dr. Forrest states that he observed no effect upon the bearing down pains and pain in the back. So it seems that we may relieve all the annoying symptoms by using both the local application and hypodermic injection.

Something New under the Sun—Interna Spina-Bifida.

Dr. THOMAS was consulted by a married lady, aged twenty-eight, two years married, but sterile. She complained

of nothing but pain in sacral region, and sense of weight. On examination he found a sac filled with fluid, occupying the cavity of the sacrum, and pushing the rectum aside slightly, but in no way occasioning serious inconvenience. He believed the failure to conceive was due, not to the pressure of this tumor, but to a congenital sharp antelexion, and advised noninterference. The case stumped the doctor—he didn't know what to make of it—though he examined the case repeatedly, at intervals, for two years, when he lost sight of it. Some time afterwards he was consulted by a beautiful girl nineteen years of age, who appeared to be perfectly healthy, but who suffered from dysmenorrhœa. She was engaged to be married and she and her mother were anxious to have any impediment removed that might be in the way, and hence the consultation. Dr. Thomas found a sac filled with fluid, situated in the curvature of the sacrum, and impinging on the vaginal canal to such extent as to almost completely occlude it, and this, the doctor thought, was the cause of her dysmenorrhœa. He strongly advised non-interference, stating that in view of the obscurity of the case radical measures were not justified. Mother and daughter insisted, and finally the doctor consented to a compromise—he would aspirate the sac. He did so with the smallest-sized Dieulafoys needle, drawing off eight ounces of perfectly limpid non-albuminous fluid, which was submitted to Dr. Garrigues for examination. Dr. G. declined to give an opinion of the nature or source of the fluid. The effects of this operation were alarming; the girl was thrown into violent fever with headache, which lasted several days. This was attributed to the “thief in the community,” malaria, and treated with qui-

nine and morphia hypodermically. Some six months afterwards, the patient and her mother called again: the sac had refilled, and they renewed their importunities for an operation. Dr. Thomas was strongly impressed with the impropriety of any operation, especially in view of what has just been related, and was possessed, he says, of a strange feeling of dread and fear. However, he yielded. He would open the sac, and establish drainage. With proper assistance, patient in lithotomy position and anæthetized, Dr. Thomas made an incision into the sac and stitched the edges to the vaginal opening. There was discharged about half a pint of the same clear fluid, resembling hysterical urine. In five hours, at 8 P. M., she was seen by Dr. DuBois, one of the assistants; severe headache and marked tendency to hysteria. In the morning, headache more severe, pulse 110, temperature 102. In the evening, symptoms same, with a peculiarly wild and maniacal expression. Still the doctor did not suspect the real nature of the case. Next morning all symptoms were favorable, but in the afternoon the physician was summoned in haste to see her. Found her in a condition bordering on hysterical mania, with pulse of 120 and temperature 104, with strong tendency to opisthotonos, and showing marked signs of incipient tetanus. “Now,” says the doctor, “there suddenly flashed across my mind the full recognition of the case; an exactly similar one, which had occurred to Dr. Emmet in the Woman's Hospital, came back to my memory, from which, until now, it had been entirely effaced; and, as if a curtain had been lifted, I saw clearly what had, until this moment, been so obscure. I had opened a sac formed by the meninges of the cord, which had projected through an imper-

fection in the sacrum, into the pelvic cavity. The membranes of brain and cord were deprived of the rachidian fluid, and the consequences were before me! I at once collected my assistants and anæsthetized the patient with chloroform, and sewed up the opening in the sac. * * * * Whether from chloroform narcosis or not I cannot say, but for some hours after this, the patient markedly improved, and I had great hopes that I had retraced my unfortunate steps in time; but about twelve hours after the closure of the sac the heart suddenly failed, opisthotonos occurred, the patient shrieked from severity of her cephalalgia—and died!"

In the conclusion of this most interesting record, Dr. Thomas says:

"Where a cyst is found in the pelvis, behind the rectum, filling the hollow of the sacrum, apparently attached to that bone, let the diagnostician carefully exclude the possibility of its being spinabifida before interfering with it."

2. "If it be decided to interfere with such a tumor, let a small portion of the fluid be first drawn by hypodermic needle and if this be found to be a limpid, non-albuminous fluid, let the probabilities of the sac being connected with the meninges of the cord receive due consideration, and guard against further interference."

DISEASES OF CHILDREN.

Carbonate of Ammonia in Scarlet Fever.

Dr. A. W. JACKSON, of Brooklyn, writes to the *Med. Record*, calling attention to the treatment of scarlatina first brought prominently into notice by Dr. Peart, of England. This consists in the administration of from three to seven grains of carbonate of ammonia

every hour for the first day, and then at longer intervals. Purgatives are to be avoided during the early stages of the disease. The writer states that he has had occasion to test this mode of treatment, and can endorse it heartily. In addition, he employs the fluid extract of eucalyptus internally and as a gargle. When there is much exudation, a mixture of carbolic acid and iodine in glycerine is painted over the parts. In too rapid recession of the rash, Dr. Jackson applies cloths dipped in thick mustard water, or wraps the child in blankets wrung out in hot water.

The Treatment of Scarlet Fever by Scalded Oatmeal.

As is very well known, the process of desquamation which follows scarlet fever, varies very much in different individuals; sometimes it is accomplished by particles so fine as to be hardly perceptible, and these are a very frequent and certain source of contagion by means of clothes and otherwise, much more so than the scales as ordinarily thrown off. It is evident that this being the fact, it must be much more difficult to prevent contact and consequent contagion with these fine, almost imperceptible scales which are floating in the atmosphere, than where desquamation occurs in large patches of skin. To obviate this danger, Mr. GEORGE SMITH, of Somerset, England (*Bristol Medico-Chirurgical Journal*), states that he has for several years been in the habit of having his patients well sponged over the surface of their bodies, commencing, as a rule, about a week after the appearance of the eruption, and continuing the process until desquamation is complete, with a mixture of one ounce of oatmeal to a pint of boiling water. The solution to be made fresh every day, and used

tepid, or at such a temperature as may be comfortably borne by the back of a finger. His reason for using this particular combination is that the gluten in it sticks the scales to each other and to the surface of the body, thus allowing of their being removed from one sponging to another without the ordinary risk of infecting either atmosphere or clothes, and thus greatly lessening the risk of spreading the disease. Secondly, the gluten fills up the cracks of the new skin and protects it from cold, as patch after patch of it becomes bare, and it thus, to say the least, greatly lessens the risk of the dropsy which so often follows upon this disease.—*Therapeutic Gazette*.

Treatment of Whooping-Cough.

Belladonna has an established reputation in pertussis, and is the principal agent in the following formula employed by Dr. ROGER (*La France Medicale*). He gives a syrup of belladonna (two parts) and of valerian and digitalis (of each one part), from one to six teaspoonfuls in the twenty-four hours, according to the age and the intensity of the symptoms. For children under two years, M. Roger commences with half a drachm a day, and gradually increases the amount to two drachms daily. It can be given in milk or simply mixed with water. When it is difficult to administer in this form, he replaces the syrup by the tincture: *R. Tr. belladonnæ, 10 parts; tr. valerianæ vel moschi, 5 parts: tr. digitalis, 5 parts. M.* Of this the aggregate quantity for an infant under two years is five drops daily, gradually increased by five drops until thirty are given in the twenty-four hours. For children from two to five years of age, ten drops may be given, and increased in the same way.—*Coll. and Clin. Record*.

Oatmeal for Constipation in Children.

The writer has found this useful used in the following way: A table-spoonful of fine bran in bread and milk. The bran should be allowed to soak in the milk, and then when warmed up to a little below boiling point; it should be poured on the bread.—*Brit. Med. Jour.—Archives of Pediatrics*.

Treatment of Aphthous Vulvitis in Children with Iodoform.

Iodoform seems to be especially suited for the treatment of this disease, and is recommended therefor by BOUCHUT. This author has observed that it usually occurs between the second and fifth years of life, and is especially common in hospitals. Two-thirds of the cases are associated with measles, and gangrene of the vulva has also been frequently observed in connection with it. The treatment consists in applying a layer of the powder to the vulva once in twenty-four hours. If the perineum is affected, treatment should extend equally to it. To the local treatment, general treatment must also be added, if required.—*Archiv. di Patol. Inf.* (from *Paris Med.*)

Diabetes in a Boy Aged Seven and a Half.

Diabetes in children is so comparatively rare, that all cases are worthy of record. Hence, we note that to the Liverpool Medical Institution (January 14, 1885), Dr. WHITFORD showed a boy, aged seven and a half, who was the subject of diabetes. He was the oldest of four children. The others were strong and well developed. When the mother was seven months pregnant of the boy shown, she was obliged to nurse her own mother, who was ill, and for three weeks was not able to go to bed. The labor

passed off naturally, but at birth the child was very puny and wizened-looking; improvement set in when it was three weeks old, however, and at three months it was a healthy looking child. It remained healthy on the whole until two years ago. At school he learned but slowly; later on he wetted his trousers and bed, drank and ate greedily, and was drowsy. He passed, in October, 8, 9, and 10 1-2 pints of urine per diem, of a sp. gr. of 1042. The quantity of urine passed gradually diminished until it reached two pints daily, but the sp. gr., which had kept at the same level nearly the whole time the child had been under observation, at last, and rather suddenly, went up to 1052. There was nothing pointing to inter-cranial mischief.

Dr. Joll stated that a patient of his was in India with her husband, and, when seven months pregnant, her husband, when out hunting, was attacked with sun-stroke. He became maniacal, and shot several policemen, under the delusion that they were pursuing him. The lady naturally suffered much distress, and returned to England. The child, of which she was pregnant at the time—a boy—did well, and nothing abnormal was noticed till he was about seven years old, when he became diabetic. He wondered whether the intra-uterine life of the children had any bearing on the disease.

Dr. Carter said he had at the present time three children under his care, all diabetic; but they were improving, and he hoped they would eventually get quite well.—*Med. and Surg. Reporter*.

The After-Treatment of Vaccine Vesicles.

Dr. F. P. ATKINSON (*Brit. Med. Journal*), suggests the following directions to be given after vaccination: 1.

If the arm become red and inflamed, apply powdered oxide of zinc, starch, or flour. 2. Never apply moisture of any kind, whether in the shape of a poultice or cold compress, as it tends to convert the vesicles into open sores. 3. Never apply oil to prevent the clothes from sticking to the arm, as it will do nothing of the kind. If the scabs be rubbed off and the marks be deep and not inclined to heal, it is best to apply some pieces of lint (of just the size of the sore), soaked in dilute nitric acid lotion (seven minims to the ounce), and keep them covered with oiled silk.—*Med. Medical Journal*.

OBSTETRICS.

Cases Illustrating the close resemblance between the Clinical History of Tubal Pregnancy and Pregnancy in the Bicornuted Uterus.

ALEX. J. C. SKENE, Prof. of Gynecology, in the Long Island College Hospital, Brooklyn, N. Y. Within the past two years I have seen three cases of pregnancy in women having bicornuted uteri. Two of them were seen in consultation, and the other was a patient of my own, who was treated for dysmenorrhœa before she became pregnant, and has remained under my observation up to the present time.

All of them presented symptoms and physical signs markedly indicating tubal pregnancy.

In the first case, seen in consultation, the history given by the attending physician, was as follows:

She had not menstruated for nearly four months, and during that time she presented the usual symptoms of pregnancy, and had almost constant distress in the right side of the pelvis. She had

also had a number of attacks of quite violent pain and tenderness in the same region.

About forty-eight hours before I saw her, she began to have hemorrhage from the uterus, which continued off and on during that time, accompanied with intermittent pain in the right side, which gradually increased in severity.

Her physician, suspecting that she was miscarrying, made a digital examination, and found a large mass, resembling, to the touch, the body of a pregnant uterus, but occupying the right side of the pelvis. The cervix uteri was not then dilated.

He endeavored to relieve the pain and control the hemorrhage, but did not succeed in accomplishing either object. In fact the pain increased in severity and the hemorrhage became more profuse.

He then called a neighboring physician in consultation.

They agreed to settle, definitely, the diagnosis, by exploring the uterus, which they did by passing the sound. The instrument passed to the left of the medium line, into what appeared to be the empty cavity of the uterus. After carefully exploring the uterus, they decided that it was empty, and that the mass on the right side was probably the product of an extra uterine or tubal pregnancy. The subsequent history of the case soon threw doubt upon this diagnosis.

The pain and hemorrhage continued intermittently, and at this stage of the case I was called to see her with her attending physicians. I found the mass on the right side, as already described, and also a smaller body continuous with cervix, and inclined towards the left. The cervix had become considerably dilated, and the ovum could be readily felt through the os.

It was then evident that the mass on

the right side was the developed right horn of the uterus, which contained the ovum. Vigorous contractions continued, and with a little aid the ovum was expelled completely, and all pain and hemorrhage soon subsided.

The second case was in the act of miscarrying when I saw her with her physician. I learned that she had had the usual evidences of pregnancy, but suffered from occasional attacks of severe pelvic pains on the left side. She consulted a physician in New York, who made a diagnosis of extra uterine pregnancy. The patient was treated by another practitioner with electricity, but whether for the purpose of arresting the gestation, or not, was not ascertained. She was taken with hemorrhage and uterine pains, and called in a physician living near her in Brooklyn. The case presenting some peculiar features, the physician who first saw the case was called in consultation, and he affirmed the diagnosis of tubal pregnancy. The case continued to progress like an ordinary miscarriage, and I was called in consultation. I found the condition about the same as described in the preceding case, and was able, in a short time, to remove the ovum.

The history of the third case was as follows: The lady was twenty-six years of age when first seen, and had always enjoyed fairly good health, excepting at her menstrual periods, when she suffered considerable pelvic pain. She had been married three months, during the last two of which she had suffered almost continuously. Her dismenorrhœa had increased in severity, and in the intra-menstrual periods she suffered from pelvis tenesmus, backache, leucorrhœa and dysparunia.

On digital examination I found the cervix uteri low down in the pelvis, and on each side the horns of the uterus

could be distinctly made out. The right ovary was found behind and close to the fundus of the horn of the uterus.

The left ovary was prolapsed, being found at the junction of the horns and the cervix, and it was exceedingly tender to the touch. The sound could be, with difficulty, passed through the cervix into the right horn about 2 1-2 inches. The instrument only could be made to pass to the left 1 3-4 inches. The cervical canal was under size. Bromide of potassium was prescribed in the hope of relieving her ovarian pain.

Hot water vaginal douche was directed to be used night and morning.

Subsequently the canal of the cervix was dilatated until a No. 9 uterine sound could be passed with facility into the right horn of the uterus. At her next two menstrual periods she suffered less pain.

Three months from the first time I saw her, she was dismissed, and was not seen again for ten months. She returned again and reported that she had not menstruated for nearly two months, and that her former pelvic pains had returned with increased severity. I then found that she had all the symptoms of pregnancy. On digital examination, the right horn of the uterus was found to have increased to twice its original size. Had I not been familiar with the case, I am confident that I would have made a diagnosis of tubal pregnancy. From this time onwards she continued to have pelvic pain, with occasional paroxysms of lancinating pain in right side. After three and a half months of pregnancy she began to improve, and she is now at the sixth month and progressing quite favorably.

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Breech Presentation with an Unusual Complication.

Dr. C. CALDWELL (*St. Louis Cour. of Med.*): I was called to attend Mrs.

C—, who was in labor with her eighth child. She was a French Canadian, æt. 31, married at the age of fifteen, and was strong and healthy.

On my arrival, she told me "she had been in labor two hours and that the waters had broken before she had her first pain."

As soon as I could warm and disinfect my hands, I made an examination. The os was dilated to the size of a small door knob, soft and patulous.

Both feet were presenting and protruding through the os. By passing the index finger up into the uterus, above the brim, the tuberosities of the ischia, vulva, anus of the fœtus could be felt to the right of the median line. By palpation the knees could be felt above



the brim on the left. The fœtus seemed to be seated on the right brim of the pelvis with her knees resting on the left, sticking her feet down through the os uteri for the accoucheur to seize hold of.

That this peculiar and unique position was an impediment to labor, no one can doubt, if the diagram is a correct one.

Whether the second stage of labor could have been completed without assistance it is impossible to say, but I think not.

The *liquor amnii* had all escaped, so I dilated the os with my hand, completing the first stage of labor as quickly as possible. By bi-manual manipulation I changed the position of the fœtus, so that it was possible to bring down the feet, in the following way :

I introduced my right hand into the vagina, and the index and second fingers into the uterus : placing the ends of the fingers against the tuberosities of the ischia, I made pressure upwards and to the right, while with the left hand over the fundus uteri, I made pressure on the occiput of the fœtus, forcing the hand downwards and to the left. Holding the fœtus in its new position with the left hand, I easily brought down the feet with my right. While I was delivering the body of the fœtus, I asked one of the attendants to warm a towel to wrap around the child while I was delivering the head, expecting some delay, for it was quite large. As I was in the act of wrapping the towel around the child, the mother, with one mighty muscular effort and a scream, expelled the head, making me feel happier than any one present, except the mother.

Functions of the Membranes in Labor.

Dr. BYFORD closes an article, published in the *Chicago Med. Jour. and Examiner*, as follows :—

The following is a fair sample of a large proportion of obstetric cases in my practice :

Mrs. M—, a healthy, robust, Canadian primipara, twenty-five years old, sent for me at 5 A. M. I found her suffering intensely with very frequent and very painful uterine contractions, which had commenced about six hours before. The os uteri was dilated to about the size of a silver twenty cent piece, and in another hour to, perhaps, the size of a

silver quarter of a dollar, and the pains continued as before. I prescribed fifteen minim doses of McMunn's Elixir of Opium, to be repeated every hour until easier, and left her for two hours. I returned to her soon after she had taken the third and last dose, and found her dozing between pains and not complaining at all. I ruptured the membranes after they had protruded through the vulva and delivered her at 10 A. M. No unusual symptoms occurred then or afterwards, except that she (I use her own expression) "had the baby almost without any pain."

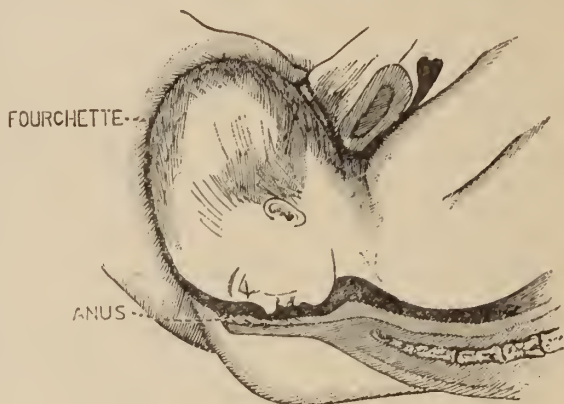
When the membranes are ruptured at the end of the first stage, there results, after a temporary rest, a rapid and very great change in the character of the labor, but when they are preserved from rupture it is impossible to tell, without the finger in the vagina when the first stage ends and the second begins. The torment that belongs to the stretching of the cervix subsides, and the labor gradually assumes a straining character, but only at the last moment, after the vulva is dilated to half or two-thirds of the size necessary for the exit of the head, is that severe suffering felt, of which primipara are otherwise wont to complain as soon as the head commences to bulge the perineum, or even after. The vagina is filled with a tumor so smooth and soft that its presence cannot be felt by the patient at any one point, so elastic that a light finger touch indents it, and yet the whole power of almost every uterine muscular fibre, bears efficiently upon it.

'Tis strange that obstetric science can teach the deliberate breaking up of this simple process of nature and the substituting of an unnatural and artificial one, by which nearly all of the fibres of the lower half of the uterus operate only to contuse its own structure against the

bare parts of the fetus without materially aiding in its descent, while the fibres of the fundus jam the hard, rough, inelastic and comparatively unyielding head, down through the vagina against the perineal centre, bulging and stretching the perineum, according to Lusk, "from four to five inches in its antro-posterior direction," and all of this without any provision for a gradual dilation of the vulva, or of making its axis, before delivery of the head, correspond with the axis of the pelvis.

Let us glance, for a moment, at the mechanism of dilatation of the perineum and vulva by means of the membranes: When the pouch reaches the vulva, it becomes conoidal, and begins to protrude during pains, changing its shape according to the requirements, in much the same manner as in dilating the cervix and os; and as it protrudes more and more, the fourchette descends

transverse diameters; the transverse muscular fibres, instead of being farther separated with each pain, as when the head is the dilator, are brought nearer together, and hence, instead of being

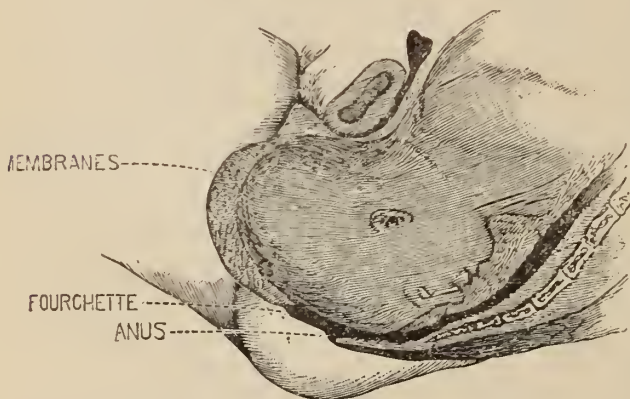


After Schroeder.

ruptured separately and easily, can be ruptured only as a solid mass, and with proportionate difficulty.

The posterior wall of the vagina, instead of being ballooned, is but slightly stretched along its antero-posterior diameter, and hence is not liable to that attenuation or transverse rupture which makes a sort of pouch or pocket for the child's shoulder to catch in and tear through the perineum.

There are other reasons for keeping the membranes intact: malposition of the head in the pelvis can more often be determined before rupture, and be corrected



to within about half an inch, or less, of the anal orifice. The perineum thus, instead of being bulged and stretched to form a thin cap over the presenting part, is stretched only in the direction of its

later and with greater facility. The body of the child cannot easily be grasped by irregular or tonic contraction of the uterus, as it occasionally is after rupture, when the parts of the child im-

pinge upon the interior of the uterus—a condition of affairs which, when present in only a slight form, sometimes renders impossible the rotation of the occiput forward without disastrous twisting of the child's neck. The cord is much less liable to prolapse, and, if prolapsed, can be more easily made to slip back into the uterus.

After the membranes have once protruded through the vulva, they are, of course, liable to be ruptured with any strong pain, and if they do rupture before complete dilation, there will be a liability to some contraction of the vulva before the head can descend to take the place of the membranes. In such instances there is, of course, some delay in the delivery after their rupture. After having ruptured them too soon in a number of instances, I now wait until the head threatens to come through with the membranes intact, and, in order to keep them so until then, I advise my strong patients not to bear down much, or else give a little chloroform with each pain. We can usually by thus diminishing the pressure, delay rupture long enough for the head to be delivered with or between the succeeding pain or two. The uterus not having been long in direct contact with the fœtus, the least possible injury will occur to each; the vagina will have suffered neither from dragging down nor friction, nor will the hemorrhoidal circulation be long interfered with. But above all, the perineum will have been taken care of, and Goodell's riddle of the sphinx be solved.

Whenever the membranes rupture before their office of dilating the vagina or vulva is completed, a strong or covered rubber bag may be introduced and then inflated with water or air, until it fills the lower unoccupied part of the vagina, so as to be made to dilate the vulva,

during pains, somewhat after the manner of the membranes themselves. When a rubber bag is not at hand, the vulva can be partly dilated by two or three fingers placed in the vagina and pressed backwards gently, but firmly, with each pain, and the capping of the head by a membranous perineum, wherein lies the chief danger to its integrity, be prevented.

The Value of Quinine, and some of its Congeners in Parturition.

From a paper with the above title, Dr. ANDREW MULLAN draws the following conclusions :

1. Quinine, or quinetum, in doses from four grains and upwards, in powder, will start labor pains afresh in twenty or thirty minutes. Repeated at intervals of half an hour or an hour, it will maintain them strongly.

2. It produces no headache—hardly ever a trace of the cinchonism caused by similar doses under other circumstances—nor sickness, the bitter taste being the only disagreeable circumstance connected with it.

3. The pains it produces are not continuous, like those of ergot, but intermittent, like those produced by normal labor, and evidently not the result of a special stimulus exerted over the uterus only, but of a tonic effect exerted over the whole economy. The patient often feels stronger.

4. The action produced, when ergot is given alone, in cases where the patient has been exhausted, seems often to be spent in the delivery of the child, leaving the uterus in a state of exhaustion, unable to contract upon and expel the placenta, allowing hæmorrhage, and necessitating extraction. Such is not the case when quinine is properly used, either alone, or before the ergot.

5. It can be used where ergot is absolutely contraindicated with perfect

safety, both to mother and child. In one case, five or six hours intervened between the giving of the first dose and the onset of pains, and the delivery of the child, yet all was right. Except in one case, Dr. Mullan says that he does not remember a child being born alive, when more than two hours elapsed between the administration of ergot and delivery.—*British Med. Jour.*

Pregnancy with Persistent Hymen.

ARNOUX (*London Medical Record*) narrates the case of a young married woman, aged 23, who sought advice for constant vomiting. She doubted that she could be pregnant, as an obstacle existed which prevented perfect connection. On examination the finger was arrested at about an inch and a third from the ordinary site of the vulvo-vaginal orifice by a diaphragm, which in the upper right part with difficulty permitted the entrance of the tip of the finger; beyond this could be felt another membrane, through which the finger could not be passed. With the uterine sound a very small aperture was found in the upper part of the posterior fold. The apertures did not correspond, that in the upper fold being covered by the anterior lower fold. Pregnancy was made out by rectal examination. The membranes were divided by a probe-pointed bistoury, and the woman was discharged in a few days. This case is interesting from the occurrence of pregnancy with a persistent hymen, and from the unusual site of the hymen.

Concerning a Special Form of Nymphæ and the Influence of the Same Upon Labor.

PAUL BUDIN (*Le Progrès Médical*, xii. 18, 347, 1884) states that in some females the labia minora unite by a pro-

longation posteriorly instead of terminating about the middle of the vulva. There appears then both a commissure of the labia minora and one of the labia majora. The author found this in many white females, and in one colored. In one case he found a moderately deep furrow between the two commissures. Luschka and Sinety had already described similar cases. The results of this condition are either that the child's head, when passing the vulva, is thrown forward and covered with a caul, the head being retarded by the commissure of the nymphæ, or that a rupture occurs. The latter is usually central. This is contrary to the common course perineal rupture, in the ordinary condition of things it being usually to one side. One or both of the nymphæ may also in this case be torn loose.

The author proceeds to report at length a case of this kind, in a secundipara æt. 22. In this case the mid-wife who was supporting the perineum reported a rupture. The author examined, but found the perineum intact. A little anterior, however, he found lips of tissue of a blue color, which were hanging forward. On closer examination it was found that the left nymphæ had been torn from their insertion at the clitoris and were hanging loose from the vulva. On account of their posterior connection, the nymphæ in this patient formed a complete ring, constituting an obstacle to the advancing head. This, however, was removed through the rupture of the labia minora from their anterior attachment. Injections of a two-per-cent. solution of carbolic acid were made five or six times a day, and no evil sequel occurred. On the seventh day *post partum* the labia minora came away entirely. On the seventeenth day the genitalia were completely healed.

DISEASES OF WOMEN.

On two Cases of Coccygodynia.

Dr. WILLIAM M. THALLON, of Brooklyn, contributes the following interesting cases :

The two following cases were both operated on at our Sanitarium, by Dr Skene, with the result of cure in both cases. Both present some interesting points not usually mentioned in the description of the disease and its treatment.

Case I.—S. C., aged 24, a native of the United States, married two years, of nervous temperament, no children; five years ago was thrown out of a carriage by collision with a railway train, and sustained severe injuries, including fracture of one or both hips. At the time, and for months afterwards, she had much sciatic pain; this gradually disappeared, and she was tolerably well until about a year ago, when she began to suffer from backache and leucorrhea. The uterus was somewhat large and catarrhal. This condition continued, more or less relieved by treatment, until the middle of February, 1885, when she suddenly developed very severe coccygodynia. The exciting cause of that I am unable to state, but the pain was intense on rising to walk, or going to sit down, and on defecation. The seat of the pain was not limited to the coccyx; it radiated to the legs, to the back, and, most pronounced of all, there were constant and severe occipital headaches. The coccyx was tender on pressure. The patient was sleepless for two weeks and suffered so much and so constantly, that she clamored for an operation. She was admitted to the Sanitarium on March 4th, and the operation was performed under ether, on the 5th.

The coccyx was found ankylosed to

the sacrum, and projecting into the pelvis at a right angle. On cutting down, the bone was found partially denuded of periosteum, and as this extended above the point of ankylosis, the lowest segment of the sacrum was removed with the entire coccyx. The edges of the wound were carefully coapted by waxed silk sutures, deep and superficial; no bleeding of any account occurred, and no drainage tube was used. A dry dressing of marine lint was used. For three days following the operation the patient suffered great pain, coming on in paroxysms, and referred to the lower half of the back, the pelvis and legs. Opium by mouth proving quite powerless to control this, she was given Majendie's solution $\mathfrak{M}$ X., hypodermically, every two or four hours. On the fourth day the sutures were removed, there being, apparently, excellent union, and the pain rapidly diminished after that. She was kept quiet for some days longer and then allowed to get up and move about cautiously; but about ten days after the sutures were removed, a portion of the cicatrix broke down and a sinus formed; it was laid open and healed by granulation without further trouble and without pain.

She returned home cured on April 21st, 1885, in better health than she had been for years. Since the operation she has been free from occipital headaches.

Case II.—L. S., aged 32, a native of the United States, of nervous temperament, married, has one child.

A couple of years ago she fell down stairs, striking on the end of her vertebral column. For some time no symptoms specially referable to the coccyx appeared, though her general health was impaired by pain due to chronic ovaritis. During the last year she has begun to have more pain, and locomotion has

been somewhat impaired. On sitting down and getting up, on riding in a carriage, and on going to stool, pain would be referred to the coccyx. She has suffered much from occipital headaches, never passing two weeks continuously without one of great severity; she slept poorly and generally was nervously worn out and hyperesthetic.

She entered the Sanitarium on January 30th, 1885, and was operated on under ether, on February 1st, 1885. It was proposed, at first, simply to do subcutaneous tenotomy, but on examination the coccyx was found ankylosed to the sacrum, while a false joint had been formed between the first and second segments of the coccyx; it was, therefore, deemed better to remove the entire bone, and this was done. A good deal of oozing occurred, and two troublesome vessels required ligature; a drain of several strands of catgut was introduced, and the wound was closed and dressed, as in the first case.

There was much pain in the wound for the next few days, and also some darting pains in the hips. The patient had to be kept pretty well under the influence of morphine, given in suppositories.

On the sixth day the drain and sutures were removed; a sinus remained, and there was pretty free discharge of a thin watery pus. As she was doing very well, and no further trouble was apprehended, she was allowed to go home on February 28th, 1885.

A day or two after reaching home, a portion of the cicatrix broke down and sloughed out, leaving an opening, perhaps, half the size of the original wound, bridged over by one or two bits of united skin. The sides of the wound become covered with pale and jelly like granulations, and the entire surface was exquisitely tender to the touch. Pack-

ing the wound was out of the question, owing to the pain, and the doctor who has had charge has used a great variety of applications, astringent and alterative, generally beginning his dressing by local use of a solution of cocaine.

The wound is now, July 1st, just about firmly healed. Her symptoms have been long since relieved, the occipital headaches, which were the most distressing of all, having ceased immediately after the operation.

Remarks.—These two cases are suggestive. In both the injuries which gave rise to the coccygodynia, were of several years standing. In the first case, the exciting cause, whatever it may have been, was very sudden in its effects. Probably the injury produced the ankylosis five years before the coccygodynia appeared, and the exciting cause was probably inflammation which was responsible for the denuded bone. This case, therefore, belongs to the inflammatory type of the disease.

In the second case, on the other hand, the symptoms were of more gradual development, and also of somewhat different character, and point much more to a nervous origin. This case, therefore, belongs to the neuralgic type of the disease.

But both cases present a symptom which is not done justice to, as far as I can find, in any of the classical descriptions of the affection, and that is the occipital headache. In both cases this symptom was very marked; in the second case it was the one most complained of, and in both it was promptly relieved by the operation.

The history of the treatment in these two cases, raises the question whether it would not have been better to have left the wounds open from the start, to heal by granulation.

In both cases the cicatricial tissue ob-

tained by union by first intention, was of such low grade vitality, that it broke down when subjected to the strain of muscular movement in going about. Neither of these patients was fat, but there is always a good deal of adipose tissue between the buttocks; unless, therefore, much more accurate coaptation of the different layers of tissue can be obtained by buried sutures, in addition to the superficial ones, I am inclined to think it would be wiser not to sew up the wound; I am sure the sutures themselves are a source of some of the pain, and it is not unlikely that the skin over the coccyx is hyperesthetic.

In the second case, at least, in spite of the old-fashioned and quite unfashionable pathology the opinion is based on, I am confident that the alterative effect of a moderate suppuration to start with would have relieved some of the local hyperesthesia and stimulated local nutrition.

Certainly, if we have to come to union by granulation in a given case, it is better to start with that in view, rather than to be driven into it by a failure to get sufficiently good cicatricial tissue in union by first intention, to stand the wear and tear of use.

Hazeline in Menorrhagia.

In the *Practitioner*, Mr. M. CHEUTE describes a valuable remedy for menorrhagia, which is a very frequent ailment in women in Cape Colony. Two drachms of hazeline given twice or thrice daily will act so quickly that it will not be necessary to anticipate the flow, but when menstruation after it has lasted the ordinary time, is not closing naturally, hazeline given as above will effectually restrain it. It is also said to relieve dysmenorrhœa in a quick and

marked manner. — *Canadian Practitioner*.

[After reading the above, one naturally wishes to know what forms of menorrhagia are cured so easily. Does this remedy cure equally promptly menorrhagia from all causes? Is it not very extraordinary that it should act so very surely and promptly? Is it not very wonderful that it should also relieve dysmenorrhœa "in a quick and marked manner." One would not expect any remedy to cure typhoid fever and rheumatism also with "neatness and despatch." Neither would we expect any remedy to cure two affections equally well when they differ so in character. Lastly, what is hazeline? We look in vain in our text books for it. Perhaps by the time that it has been fully tried and admitted into our standard literature, it may be incapable of curing anything.]

A. J. C. S.

Emmet's Operation. When Shall It, and When Shall It Not be Performed?

Dr. E. GUSTAV ZINKE (*Weekly Med. Review*): This is a very comprehensive treatise—too long for us to review; therefore the conclusions therein contained are epitomized as follows:

1. It is evident that the operation has been performed unnecessarily for symptoms similar to, but other than those arising from lacerations of the cervix. Further, that it has been done imperfectly, in many instances, even without preliminary treatment. Therefore the failure to give relief, as reported by several, is due to those causes.

2. That from our present knowledge we cannot at this time arrive at any definite conclusion, from the fact that many of the so-called consequences of laceration of the cervix uteri are not settled beyond doubt.

3. That every one engaged in this department should carefully select his cases, and try every known means to give relief before resorting to an operation.

4. The operation should never be performed in cases of simple fissures or lacerations of the first and second degree. (Dr. Zinke divided lacerations into four degrees, those of the first and second being slight lacerations, whilst those of the third and fourth designated more extensive tears).

5. In cases of eversion and disease of the cervical or corporal cavity, or both, although attended by hyperplasia and displacement, it has been observed that all the symptoms abated and the parts returned to their natural condition, and that no laceration was discoverable after alleviative measures were instituted first, which alone caused the parts to return to a normal condition.

6. There are some cases of extensive lacerations of the cervix that seldom give rise to any inconvenience, and that, therefore, an operation should be deferred until symptoms arise that will call for its performance.

7. The operation, although indicated, should never be performed until by preparatory treatment the parts have been brought into a healthy condition.

8. Near and during the climacteric period the operation should be postponed as long as possible and the patient not exposed to any risks, since in many cases all the symptoms subside under proper treatment and never return, on account of senile involution.

9. The operation is justifiable in cases of lacerations of the third and fourth degree without complications, if there is a history of malignant disease in the family.

10. The operation may be performed with perfect propriety in young women,

as a preventive, if the laceration is bilateral and extends up to the cervico-vaginal junction, or beyond it, even though there are no pathological changes; indeed, it seems to be the duty of every one who observes a lesion to that extent to urge the operation.

11. The operation is justifiable in any degree of laceration, and in rare instances, even in fissures, when there exists cicatricial tissue, productive of reflex disturbances annoying in character, and not tractable to any other treatment.

12. The operation is absolutely indicated in all extensive rents of the os in which the cervix is everted, its mucous membrane and Nabothian follicles diseased, and especially if there be granular or cystic degeneration present, provided the parts have first been restored to a healthy condition by palliative treatment.

These conclusions were drawn by the author from his own clinical experience, from text books, and mainly from a tabulated record which he obtained by addressing a large number of our most prominent gynecologists and surgeons of this country and abroad a letter containing a number of questions, calculated to elicit their latest opinion regarding this subject. This letter was sent in printed form, with sufficient space after each question to allow a concise answer. He adopted this course to obtain an answer from all as nearly alike as possible, and to the point. He states that he also took pains to send these questions to those known to be more or less opposed to the operation.

Gynæcological Teaching on the Phantom

Professor WINCKEL, of Munich, in a lecture published in the *Archiv für Gynäkologie* (Band xxiii., Heft 2), remarks on the importance to practition-

ers of some practical training in the performance of the common operations of gynæcological surgery, and on the obstacles which prevent the dead subject from being used for the purpose of teaching these manipulations. Winckel has devised a means of giving the requisite demonstrations. He takes an ordinary phantom, such as is used in midwifery lectures, *i. e.*, a pelvis, with limbs, etc. From a female cadaver he cuts out in one mass bladder, rectum, uterus, vagina, and vulva. These structures are thoroughly washed, and soaked for some weeks in corrosive sublimate solution, with a quarter of its volume of glycerine added to destroy putrefactive germs. This removes smells and renders the parts supple. Then, with India rubber bands and sutures, the parts are fixed in the proper position inside the pelvis of the phantom. When this has been properly done, the teacher can demonstrate on the parts so prepared the use of the different specula; the sound, perineal, vaginal and vesico-vaginal plastic operation; removal of urethral caruncle; incision of cervix uteri; Emmett's operation, etc., in a very satisfactory manner.—*St. Louis Cour. of Med.*

Clitoridean Crises Before the Pains of Progressive Locomotor Ataxia.

PITRES directs attention anew to the fact that locomotor ataxia is not infrequently ushered in or accompanied by attacks of voluptuous sensations in the female, which must be regarded as being analogous to the erections and spermatorrhœa, which are well known to occur in men in the early stages of the disease. The author reports three cases of tabes in which these attacks were observed. The first case is a woman aged 34 years, who was married, had two healthy children, and always en-

joyed good health. She worked a sewing machine, and it became exceedingly disagreeable to her, because in moving the pedals the rubbing of the thighs against one another provoked attacks of voluptuous sensations, with erections of the clitoris and ejaculation, just as occurs in natural coitus. These attacks occurred spontaneously and in the absence of any erotic thoughts, and sometimes occurred as often as three or four times in the same day, but a succession of attacks was often followed by a free interval of one or two weeks. Each attack was followed by great languor and distaste for food. It was not until four years after that the lancinating pains and other symptoms of locomotor ataxia manifested themselves.

In the second case the attacks of sexual excitement began about a year before the commencement of the other symptoms; but in the third case the woman suffered from these voluptuous sensations for ten years before the characteristic lancinating pains began in the lower extremities. The author concludes that when females suffer from spontaneously recurring attacks of voluptuous sexual sensations, locomotor ataxia ought to be suspected in the absence of any other symptoms, and a diagnosis of tabes may be made with certainty if these attacks are accompanied by such symptoms as absence of the patellar tendon reaction, lancinating pains, gastric crises or ocular troubles.—*Manchester Med. Jour.—Obstet. Gazette.*

Mechanical Dysmenorrhœa.—Rapid Dilation.

A clinical lecture by Dr. THEOPHILUS PARVIN, *Coll. and Clin. Record*.—The patient who will be first presented you has the following history: She is twenty-four years of age, been married six years, but has never been pregnant.

She suffered from dysmenorrhœa before marriage, and this suffering has been greatly increased since.

Examination shows that there is very decided ante flexion of the uterus, and that the uterine cavity is peculiarly sensitive, especially in the vicinity of the internal os. I should state that the pain she has in menstruating is intermittent in character—a pain and then a pause, and thus the series goes on, just as you have in the first stage of labor a succession of pains with intervals of rest, continuing until the resistance of the os uteri is overcome. Of course, in this use of the word pain, we consider it the synonym of uterine contractions—a liberty of speech very commonly taken, though the contractions are not the pains, only their cause.

After the patient is etherized, rapid dilatation of the cervical canal will be done. Dr. Matthews Duncan, who rejects mechanical for spasmodic dysmenorrhœa, regards dilatation as the most important means of cure; his method of dilating is by bougies, gradually increasing their size, the whole process being accomplished in six or eight times, the intervals being two or three days. Of course, any dilatation to be efficient must include that of the internal os uteri. Now, it makes no great difference whether the disease be called mechanical or spasmodic, when the treatment is the same. It is possible that a sensitive, irritable cervical canal may have its sensibility blunted by the repeated passage of a bougie, just as a similar condition of the male urethra is treated, and thus spasmodic contraction be prevented; but whence the necessity, if this be not a mechanical dysmenorrhœa, of increasing the size of the dilating bodies, and how does it happen that in almost all cases there is some uterine deformity, ante flexion being especially frequent?

In addition to a graduated set of solid uterine bougies, sponge, sea-tangle and tupelo tents are used for dilatation. But most operators prefer an instrument devised for the especial purpose. The instrument which I will use in this case, is the device of Dr. Ellwood Wilson, of this city; it is especially suited for cases where the flexion is great, and it further has this advantage over the "Ellinger," the blades of which move apart in parallel lines, and at least most, if not all, of its modifications, they having the same parallelism of movement, that it does not dilate equally, but most at the internal os, the point where the greatest dilatation is needed. The dilatation may be abrupt or gradual; the latter, of course, is, as one might infer, the safer, and may be done without an anæsthetic, but it may require weeks for its accomplishment. I should have stated that there is posteriorly to the uterus, and apparently attached to it, a tumor, hard, resisting and somewhat irregular in form, which is probably the result of an inflammation of a portion of the pelvic peritoneum. Such inflammation, or pelvic-peritonitis, is not uncommon as a consequence of severe and long continued dysmenorrhœa. If you find sensitiveness of the inflammatory swelling, you would wisely postpone the dilatation needed in the case, lest you might kindle anew the inflammation. I now go on with the dilatation, gradually, by means of the screw at the handle of the instrument, separating the blades a half or two-thirds of the distance they can be extended. Then, after keeping them thus separated for two or three minutes, I reverse the movement of the screw, bringing them together, and withdraw the instrument. I now pass into the cervical canal an applicator, wrapped with cotton, the latter being saturated with a solution of iodine in

glycerine, this solution being the strength of Dr. Churchill's tincture. It is almost certain that, for a time at least, menstruation will be free from pain, and it is possible that during this interval the patient may become pregnant, for dilatation is not only a cure for dysmenorrhœa, but also may be for sterility. Dilatation is resorted to almost daily in the Hospital Dispensary, and has been for years, without there having occurred in any cases any serious results. The dilatation is usually gradual, that is, the patient comes several times before the stretching of the cervical canal is completed, and hence, probably, the happy exemption from serious consequences.

A New Explanation of the Menstrual Process.

Theory of Loewenthal.—After having thus discussed the various theories, the author asserts that everything speaks in favor of a relation between ovulation and menstruation, but that this relation is not *immediate*; ovulation being considered as the cause, and menstruation the consequence. We can, therefore, only consider this connection as *mediate*, and are compelled to admit that between ovulation, the cause, and menstruation, the consequence, there is room for a third factor. This third factor, the author considers, is a non-fecundated ovum.

This is how the author understands the whole of the menstrual process.

1st. The Graafian follicle ruptures, the ovule, arrived at maturity, escapes therefrom, and by means of the Fallopian tube reaches the uterus.

2d. Encountering the first folds of the uterine mucous membrane, and this is ordinarily near the tubal orifice, the non-fecundated ovum fixes itself there, and the direct consequence of its pres-

ence is the tumefaction of the mucous membrane and the formation of the menstrual decidua.

3d. If the ovule, having reached this point, be fecundated by the spermatozoa, instead of a menstrual decidua, a decidua vera of pregnancy is formed.

4th. If, however, the ovule remains unfecundated during a certain time, which constitutes the duration of its vital activity, it dies and determines an active sanguine congestion, the retrogression of the menstrual decidua, and, in consequence, a hemorrhage.

5th. In its turn, this sanguine congestion thus produced, reacts on the mediate source of its origin—the ovary—and assists in bringing about the rupture of a new follicle, which has meanwhile reached its maturity in the ovary.

(It is self-understood that this does not exclude that any other cause, capable of bringing about a menstrual congestion, may produce the same effect, and to determine the rupture of another follicle arrived at maturity.)

This theory, according to the author, answers all the preceding objections, and throws light upon many points that have remained obscure or uncertain to the present time. As to the objections that may be raised against his theory, he ranges them under the two following heads:

1st. The possibility of a non-fecundated ovum of fixing itself upon the uterus.

2d. The persistence, after this nidation of the ovule, and only after this nidation, of a vitality of the ovule, a vitality which oscillates according to the individuals in the feeble limits of time.

To reply to the first, the author combats the theory of Coste, the fecundation of the ovule in the ovary, or in the upper fourth of the Fallopian tube only, and with Pouchet regards the uterus as

the seat, the point where fecundation occurs. He thus rejects the existence of the albuminous layer which surrounds the ovule, when it has once passed the upper fourth of the tube (Gerbe, Coste), or rather admits that it is destroyed before the ovule reaches the uterus; its existence being only temporary. He admits the possibility of the spermatozoa being conserved in a state of vitality for a certain time in the genital organs; explains the rarity of extra-uterine pregnancies by the rarity of fecundations of the ovule in the ovary or in the tube, and summarizing our actual knowledge of fecundation, arrives at the following conclusions:

Facts prove that coitus may be fecundating at no matter what day between two menstrual periods. This being so, it must necessarily be that the two factors (ovule and spermatozoa) of fecundation must reach each other. But, as in the human species, they are set at liberty at different epochs and as the coitus may be fecundating as well the first day as the last of the intermenstrual interval, as they are both active, this setting at liberty at different epochs entails the consequence: One must necessarily wait for the other. But, as the spermatozoa, as has been shown by analogies and material proofs, can not be the factor that waits, it necessarily follows that it must be the ovule that awaits its collaborator, and the laws of anatomy and physiology compel us to conclude that this ovule, conserving its vitality, fixes itself in the non-fecundated state in the place (normal or abnormal) which shall later be the seat of development of the foetus.

The second part of the memoir is devoted to defending the author's theory, and to the clinical lessons that may be drawn therefrom. Loewenthal points out the points to which the observation of

authors should be especially directed. We can not, to our regret, follow the author in his pathological considerations, assuredly of the greatest interest, but this would lead us too far beyond the limits of a simple analysis, and we shall confine ourselves to giving the conclusions of the author, which he has formulated in the following sixteen propositions:

1. The periodical hemorrhage which arises in the genital organs of the woman, is not the consequence of a rupture of a Graafian follicle (a rupture which ordinarily occurs at the same time), but of the disappearance of the tumefaction of the uterine mucous membrane, the tumefaction which is independent of this rupture, and has occurred before the hemorrhage.

2. The menstrual decidua is caused by the nidification of the last ovule escaped from the ovary and its remaining unfecundated.

3. It is formed in the same way as the decidua of pregnancy when the ovule has been fecundated, and it is destroyed after the death of the ovule, when this ovule has remained unfecundated.

4. As regards each individual menstruation, the rupture of the follicle and the menstrual have no other casual relation as bearing one upon the other, than this fact, that the causes and active circumstances arising at the period of the establishment of the sanguine outflow, are at the same time an occasional cause of the rupture of a mature follicle.

5. The coincidence of a rupture of a follicle and of the hemorrhage is not at all necessary. Both may occur independently of each other. A rupture of a follicle may occur without there being at the same time production and retrogression of a menstrual decidua, and the hemorrhage, this secondary consequence of the last escape of an ovule, may oc-

cur without the simultaneous rupture of a follicle.

6. The periodicity of the hemorrhage is due to the extra-follicular vitality of the ovule that has fixed itself upon the uterus and remained unfecundated. The anomalies of this periodicity (general or individual) depend upon idiopathic or accidental influences, determining a shortening, or even a total absence of this extra-follicular vitality of the ovule.

7. The ovule coming from the follicle, and having reached the uterus, is there fecundated, chiefly about the time of the last menstruation; it is then uterine, or the ovule has fixed itself outside of the uterus—it is then extra-uterine.

From all this the following practical lessons may be learned:

8. The menstrual hemorrhage, not being a physiological function, nor the necessary concurrent manifestation of a physiological function, but the direct consequence, and reinforced by innumerable repetitions of a phenomenon, produced by civilization—the non-fecundation and death of the ovule—it has all the characteristics of, and exerts the same influence as all other hemorrhages, which are always pathological.

9. Like these, and by the same influences, it is augmented or diminished.

10. The hemorrhage that necessarily accompanies the destruction of the menstrual decidua, can only then be considered inoffensive, when it occurs by diapedesis. A hemorrhage by rhexes is always useless and may become dangerous, because it becomes a cause of debility of the organism.

11. The degree of this danger stands in direct relation to the quantity of blood lost, and the quantity plus the quality, of the whole quantity of blood of the rest of the organism.

12. In these cases there is every rea-

son why we should moderate the menstrual hemorrhage, as we would do in any other hemorrhage.

13. The best means for this purpose are repose in bed and hot injections.

14. On the other hand, the absence of menstrual hemorrhage (idiopathic amenorrhea) should never be regarded and treated as a malady. It is only a proof that a function not indispensable to the life of the individual (ovulation), from some cause or other (youth, age, pregnancy, nursing, feebleness) has not manifested itself, or not manifested itself completely at its proper time, that is to say, about four weeks before.

15. Admitting the important role played by the Fallopian tubes, as pointed out by Lawson Tait, in cases where uterine dysmenorrhea, hemorrhages, fibroma or other morbid processes demand that the anticipated menopause be brought about, solpingotomy instead of castration would be indicated (partial resection of both tubes after ligating them).

16. If, in making castration, for any of the above mentioned causes, both ovaries can not be completely removed, we must have recourse to solpingotomy. —*Archives de Tocologie—Cincin. Med. News.*

Sub-Involution.

The following is a portion of an article by Dr. F. ELLINGWOOD, published in *Chicago Med. Times*.

The patient first complains that she does not feel as well as she thinks she ought after a comparatively normal confinement, she does not regain her strength, there is languor, frequent headaches, principally on the top of the head with soreness of the scalp, there is almost complete loss of appetite, general weakness and despondency. As the disease progresses, there is backache, pains

throughout the pelvic region, soreness more or less severe over the fundus uteri, and perhaps over one or both ovaries, also a sensation of heaviness, or weight, a dragging in the lower abdominal region, with a tendency to support the abdomen with the hands; there will probably be an excessive sanguineous discharge with leucorrhea, bowels constipated, more or less irritation of the bladder, with perhaps an almost constant desire to urinate.

The symptoms point unmistakably to the womb as the seat of the disorder, and an examination per vaginam will reveal a descent of the womb, with evident engorgement. But the fact which most attracts the attention of the physician is the size of the womb; it is nearly as large as immediately subsequent to confinement, and its enlargement resembles that of the pregnant condition in its uniformity. The treatment suggested must be begun immediately, as the condition soon becomes chronic, and its amenability to treatment is lessened. First, absolute rest in bed must be enjoined, mental quiet, a mild, light, easily digestible diet, perfect cleanliness, and the use of the vaginal douche once or twice daily, a regular and normal condition of the bowels. A mild tonic must be given, not necessarily one containing iron, unless there be anæmia, but one which will most rapidly restore a normal condition of the nutritive functions.

For a specific effect on the uterus, nothing excels ergot and bromide of potassium. The following is the formula usually administered by the writer: Ext. ergot fl. ʒiv; potass. bromidi ʒijss; aqua dest. ʒi; vini xerici, qs. ʒiv. M. Sig. Teaspoonful every three or four hours.

Electricity is a most powerful adjuvant, and if used in the form of the mild

galvanic current will rapidly produce an amelioration of the symptoms, and if used immediately subsequent to confinement will absolutely prevent the conditions and the long train of evils which will surely follow, and will restore the womb rapidly to its normal condition.

It is the writer's positive opinion that the galvanic current judiciously administered early, will accomplish in three weeks in assisting the normal involution of the womb, what nature requires six or eight weeks to accomplish, without a single untoward symptom, and is thus especially applicable to those cases where circumstances seem to force them to resume their usual tedious daily round of duties earlier than is beneficial to a rapid and complete natural restoration of the uterine parenchyma.

DISEASES OF CHILDREN.

A Case of Atresia Ani.

By CHAS. JEWETT, Prof. of Obstetrics in the Long Island College Hospital, Brooklyn, N. Y.

An interesting case of atresia ani recently occurred in the maternity service of the Long Island College Hospital. The subject was a healthy male child, of seven and three-quarter pounds.

The rectum was found occluded a short distance above the external sphincter, the anal cul-de-sac measuring about three-quarters of an inch in depth. The child also had a large wormian bone between the frontal bones. The irregular upper or posterior border of the bone formed the anterior margin of the bregma. The anterior fontanella thus had five lines of sutures running into it.

The latero prone position, was found the most convenient for examination. Occular inspection of the bottom of the

cul-de-sac, by the aid of retractors, revealed nothing that assisted in determining the probable extent of the occlusion—exploratory puncture with a hypodermic needle obtained no meconium. A glass speculum was then improvised, about one inch in length and one-half inch in diameter. The instrument was made from the open end of a test tube, by cutting it off and rounding the cut edge in the flame of a spirit lamp. Passing this speculum through the sphincter, the blind end of the sac was made tense and fully exposed to view and to easy access. The membranous character of the septum was now apparent, on repeating the puncture, the needle yielding a sound as of perforating a drum-head. Quite unexpectedly no meconium was found, but a hissing sound showed that the rectal, or upper cul-de-sac, distended with gas, had been tapped by the needle. A minute opening was made with a bistory, and dilated by tearing. The child did well under the subsequent practice of rectal dilatation by the mother's finger used as a bougie. The chief point of interest in the case was the advantage of the speculum in assisting to determine the membranous character of the septum, and in facilitating its division without danger of injury to the gut or the surrounding tissues.

Incontinence of Urine in Children.

Dr. SAMUEL S. ADAMS. The bromides take foremost rank in the treatment of those cases in which an exalted nervous condition can alone account for the incontinence. They should be given in large doses at bed time.

But belladonna is the remedy *par excellence* in the treatment of those cases believed to be associated with a tonic spasm of the bladder. One of its physiological actions is to relax the tonic

contraction of the involuntary muscular fibres. The muscles of the bladder being of this class, when the atropia in the urine comes in contact with the walls of the bladder, it allays irritability and relaxes spasm. In order to derive benefit from the drug, it should be given in large doses at bed time, which should be increased, drop by drop, daily, until improvement results or its physiological effects are obtained. It must be borne in mind that children will bear much larger proportional doses than adults.

If there is a relaxation of the sphincter vesicæ or paresis of the muscles of the bladder, strychnia is indicated. But as I have never seen a case of this kind, I have had no experience with it.

If the patients are puny or in ill health, we would naturally expect better results by improving the general health while we are administering remedies.

Experience has taught me that the best success attends those patients who are treated in hospitals. In these institutions the diet of the child can be regulated, and many advantages gained in treatment. Parents will insist and believe that the physician's instructions are carried out in full; but they forget the sympathizing friends about the house who think the child unduly restricted, and who are, therefore, willing and ready to cater to its whims. For this reason it has been my custom to advise children to be placed in the hospital. If the patient can be fully controlled, success will quickly attend the treatment indicated.

I do not advocate circumcision as the certainly indicated remedy in all cases, nor do I believe that every boy has incontinence, with an elongated prepuce, should be compelled to undergo the operation. If the prepuce cannot be retracted, then I would advise operating; and while sometimes the opening

in the prepuce is large enough, yet it cannot be retracted owing to adhesions. In such cases, if these adhesions are broken up favorable results will follow.

I prefer to perform the operation of circumcision in the following manner: The prepuce is drawn forward, and Henry's clamp tightly applied; the end of the prepuce is then cut off with scissors, and the clamp left on the stump for several minutes to check bleeding; a director is then pushed along the upper surface of the glans, and the mucous membrane divided beyond the corona. The membrane is then turned back to meet the retracted skin, and made fast by five silk sutures. In about ten days the patient is well. I remove only that part of the mucous membrane that is cut off with the end of the prepuce; for by leaving a long membrane it can be turned back and thereby hide the cicatrix, which is a source of mortification to many parents. One objection to the operation is that the glans will be left uncovered, and that it destroys to some extent the sensitiveness of the organ. If this were true it would in many cases prove a great blessing, but, unfortunately, it is not true. Another objection is that the beauty of the organ is destroyed, whereas, in fact, if the circumcision is neatly done the penis presents a far better appearance than it does with a redundant foreskin.—*Med. and Sur. Reporter*.

Prophylactic Measures in Diseases of the Respiratory Tract in Children.

Zannis in *Archiv. f. Kinderh.*, B. V., H. 9 and 10.

The author of this paper, who is the director of a hospital for new born children, at Athens, Greece, finds that the greatest mortality among children under his charge is caused by diseases of the

intestinal tract, and next on the list come those of the respiratory. He considers that the cause is two-fold, the first having reference to the climate and the second to faulty hygienic conditions by which the children were surrounded when with their parents. A series of rules which he published, containing "advice to mothers," include the following:

1. During cold and damp weather children should not be taken out of doors; they should be suitably clothed and should always wear woollen shirts.
2. When in the house they should not be exposed to draughts of air.
3. The underclothes should be frequently changed.

Under the author's observation the use of woollen shirts has effected a decided diminution among hospital children in diseases of the respiratory tract. He is not in favor of cold baths before the sixth year. Other vigorous hygienic measures involving a certain degree of exposure should be deferred even to a later period.—*Archives of Pediatrics*.

A Pleasant Quinine Mixture for Children.

The *Canada Lancet* says that a most pleasant and palatable disguise for quinine may be extemporized as follows:

℞. Quinæ sulph., gr. xj.; Acidi tannic, gr. xx.; tinct. opii camph., ʒ ss.; tinct. cinchonæ, ʒ ss.; spts. lavand. co., ʒ iij.; syrup simp., ad. ʒ iv. *M*.

Shake well before using. The dose will be usually one teaspoonful three times a day, but the amount of quinia desired to be administered should govern the size of the dose. It will make a beautifully creamy mixture, if the quinia and tannin are rubbed together on a pill tile or a sheet of paper with a spatula until all lumps disappear, then put in a suitable bottle and first add the paregoric, shaking at once, then the cinchona and avander, followed by the syrup.

Pertussis.

Dr. W. C. WEBB, of Kentucky, uses the following formulæ in whooping cough with excellent results :

Croton chloral, 1 dr.; tr. cardamon comp.; glycerine, aa. 1 oz. Sig. One-half teaspoonful every four hours for a child two years old.

Croton chloral, 1 dr.; tr. belladonna, 2 dr.; tr. cardamon comp., 2 oz.; glycerine, 3 oz. Sig. One-half teaspoonful. —*Indiana Med. Jour.*

Septic Pneumonia of the New Born.

SILBERMANN, *Deutsche Arch. für. Kin. Med.*—The author reports 11 cases. Ten of the mothers had puerperal fever. In five of the infants the attack commenced on the first day, in five more on the second day, and in one on the fifth day. Four had pneumonia alone, and seven had pleurisy in addition. Four were jaundiced.—*Arch. Pediatrics.*

One of the results of the Administration of Kairin.

Dr. R. J. NUNN, (*Atlanta Med. and Surg. Journal.*) A child of five years of age was being treated for malarial fever of the continued type ; pulse ranging about 125, temperature 105 degrees F, and over. Five grains of kairin were given every two hours until thirty grains were taken. This was followed by a fall of temperature to 101 degrees F, but the urine passed was blue, commencing about twelve hours after the administration of the kairin, continuing about twenty-four hours, and then gradually resuming the normal appearance ; the reaction of the urine was acid, sp. g. 1.020, no albumen. The addition of nitric acid turned the blue color to a deep red. After standing forty-eight hours in a corked bottle the blue urine gradually assumed a normal appearance,

the change commencing at the bottom of the bottle and gradually extending to the top.

The reduction of temperature was of short duration, very much shorter than I have been accustomed to see after the administration of kairin.

This result was so unexpected that I was anxious to assure myself that it was dependent upon the kairin as a cause, and as a test I repeated the kairin after a few days, and its administration was followed by a like result.

Although I have used kairin very extensively with patients of all ages, I have never in any other case observed results similar to those just described.

The facilities for chemical analysis at my command, were much too meagre for me to attempt an investigation looking to the discovery of the nature of the substance, which gave to the urine in question the abnormal appearance described. I must therefore content myself with recording the fact, in the hope that attention being directed to the urine changes resulting from the administration of kairin, others more favorably situated than myself, may have an opportunity to thoroughly investigate the subject. I would suggest, however, that a clue to the solution of the problem may be found in the parallel action of carbolic acid.

Tonsillitis in Relation to Febrile Attacks in Childhood.

We have all been called upon at different times to see children suffering from feverish attacks, where the greatest acumen and the most careful examination fails to reveal any adequate cause. In many such cases, a writer in the *London Med. Times*, tells us that we will find a tonsillitis. Sometimes, but rarely, there will be complaint of pain in the throat.

It is, perhaps, in instances of recur-

ring pharyngitis in children of four years old and upwards, that we shall find the remembrance of what has been said most useful. Very often do cases occur where a child is said to have feverish attacks every now and then, by mother or doctor, for which it is put to bed and physicked a little, and recovery takes place in a few days. In the intervals, these children are generally regarded as being quite well. But they are often of a muddy complexion and capricious in their appetite, and are seen to have chronically enlarged tonsils. The acute attacks supervening on this chronic condition, from time to time, are liable to be very slight as far as local trouble goes, and consequently are just the cases which we would especially wish to emphasize as being often overlooked. A routine examination, therefore, of the throat, should be made in all cases of feverish illness in children, whether or no complaint be made of pain, and the doctor will be often satisfactorily rewarded by at least the possession of a definite idea as to the nature and cause of the malady he has to pronounce upon and treat.

On the casual connections of these pharyngeal affections in children but a word can be said. They do not seem to be simply catarrhal, or due to exposure, with any great frequency. But they often occur in strumous children, especially in connection with chronically enlarged tonsils, and very frequently, indeed, in those of a rheumatic or gouty inheritance.

The treatment of the acute attacks does not require any special notice here, but in many cases of chronically enlarged tonsils, excision is of unquestionable value, as minimizing, or perhaps almost abolishing the acute evil.

Chaumier—Asthma in Young Children.

(*Rev. Mens. des Mal. de l'Enf.*), Asthma in young children is more common than is usually supposed. The author has seen six cases under three years of age. The paroxysms were usually nocturnal, and in all the cases the trouble assumed the catarrhal form, and could readily be mistaken for suffocative bronchitis. The dyspnea was in none of the cases due to tuberculosis of the peribronchial ganglions, nor to heart disease, nor to emphysema consecutive to chronic bronchitis. The treatment consisted in the use of iodide of potassium, inhalations of oxygen, and the iodide of ethyl, which appeared to relieve the intensity of the dyspnea, without producing entire removal of it, however. It is believed that this treatment should be continued for a long time, until the asthma is completely cured. Deformity of the thorax may remain, with a respiratory constraint of emphysematous origin.

OBSTETRICS.

External Use of Chloroform in Difficult Labor.

Dr. A. SVANBERG recommends the external application of chloroform to the abdomen in cases where labor is delayed or obstetric manipulations prevented by uterine rigidity. By this means he has succeeded in turning, several hours after the escape of the waters, and also in removing retained placenta without resorting to the inhalation of an anæsthetic. He soaks a piece of flannel in equal parts of sweet oil and chloroform, and then places it on the abdomen between the symphysis and umbilicus, keeping it in close contact with the skin for about five minutes. If the case be a severe one, the flannel is to be soaked again and reapplied for a few minutes more; at the end of about ten

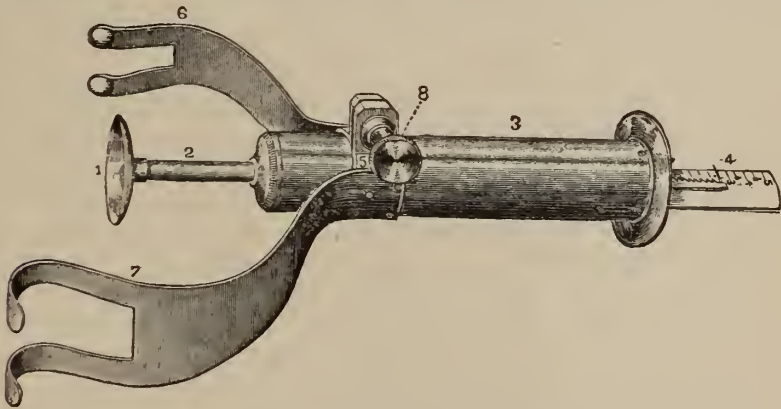
minutes the rigidity was always found to have disappeared, so that the necessary manipulations could be performed without any trouble.—*From Eira-Tidskrift for Helso-och Sjukvard.—Chicago Med. Jour. and Exam.*

The Parturiometer.

Dr. HENRY LEAMAN (*Coll. and Clin. Record*). The instrument here represented was exhibited before the Philadelphia County Medical Society. It consists properly of a metallic cylinder, in which is placed a spring accurately made to measure weight in pounds. The

membranes are broken, against the advancing part of the fœtus before full dilatation of the cervix. It can be used at the superior strait with ease. In the various conditions in which it has been employed, its registration has corresponded with experience, and rendered observation more accurate.

The parturiometer indicates when it is proper to break the membranes; when the cervix is fully dilated; when the application of instruments becomes necessary. By observing, in cases when the resistance is nil or at a minimum, and then again when it is at a maximum, the amount of force lost may thus be



1—Socket. 2—Plunger. 3—Cylinder with Spring. 4—Scale and Indicator. 5—Movable Band. 6—Short Arm. 7—Long Arm. 8—Screw.

pressure impinges on a socket, and is conveyed to the spring by a plunger; at the other end of the cylinder is a self-registering indicator and scale. The socket is placed in contact with the advancing part of the ovum, or fœtus, during the interval of pain. The effective movement of the mass is indicated on the scale during the uterine contraction. The instrument is held in position by the band and arms, which are movable by means of a screw. The anterior, or short arm, rests between the labia, against the arch of the pubes, the posterior on the coccyx. The socket can be placed inside of the cervix, in contact with the membranes; or, if the

arrived at. Also, by close observation, we may finally arrive at the separation of the true uterine force as distinct from anything else, and thus a more accurate knowledge of the physiological action of the uterus be obtained.

This instrument promises to render the attendance of labor cases more exact and scientific.

Biniodide of Mercury as a Disinfectant in Obstetrics.

H. E. P. BERNARDY, of Philadelphia, finds the mercuric-iodide a more efficient disinfectant for obstetric use than the bichloride. He recommends a solution of one to four thousand. J.

Faradism in the Treatment of Arrested and Deficient Lactation.

Dr. HENRY F. CAMPBELL, in an article in the *Atlanta Med. and Sur. Jour.* on this subject, concludes as follows:

First.—That from a consideration of the varying locality of the mammary gland upon the trunk of the several genera of mammalia, the nervous supply being furnished indifferently by any portion of the central spinal system—the object and the efficiency of the secretion being the same in all of them as in man—and especially from the known fact that anomalies in women have transferred the gland to abnormal localities, as the groin, etc., it may be decided that the neuro-dynamic excitation in the mammaræ of the human female is of the simplest nature, and no other than that under which the functions of the integument, as sensation and secretion, are accomplished.

Second.—After the foregoing conclusion in regard to the simplicity of the neuro-dynamic influences concerned in the function of lactation, and in the light of the experience of the cases herein reported, we may reasonably expect the stimulus of a well selected and judiciously applied electric or galvanic current to prove, in many cases of arrested and deficient lactation, a hopeful and often an efficient therapeutic measure.

Force of Labor-Pains.

SCHATZ, of Rostock, presented at the fifty-seventh meeting of the Gynecological Section of the German Naturalists and Physicians at Magdeburg the results of his long continued studies and experiments concerning the force of labor pains and their types, and the action of ergot.

He asserts that the intra-uterine pressure, caused by uterine contraction, only

in rare instances reaches a height of 100 millimetres of mercury, or 1 1-3 metres of water-pressure, never more than that; generally it reaches only one-half or two-thirds of the maximum. At the commencement of labor the pressure is slight, but soon attains its maximum, which is maintained through the further course of the labor. The idea that the force of the pains increases in proportion to the resistance is wholly false; rather the uterus opposes to the abnormal resistance only longer or more frequently repeated action. Exhaustion comes on only when the intervals between pains become too short or entirely cease, but not with the regular course of pains and intervals of at least a minute. In the grouped, crowding, combined pains, when the interval is shorter or absolutely wanting, the first pain is the highest, those following are lower, and our author refers these pains back to an imperfect nutrition of the uterine muscles. The force-diminishing shortening of the muscle and the force-increasing thickening of the uterine walls nearly balance each other, so that the maximum pains change in the course of the labor as to height and power, either not at all or very little.—*Archiv. für Gynaekol.*, B. xxv., H. 1. p. 117.—*Weekly Med. Review.*

Porro's Operation.

From the *Lancet* we learn that *Il Morgagni* (7th instant) reports a case of Porro's operation, successful to mother and child. The patient, M. M., æt. 40, was a rachitic primipara, with extremely contracted pelvis. She was in the 9th month of pregnancy, and had been 12 hours in labor. The removal of the uterus and appendages occupied 55 minutes. The patient, in 24 hours, was in the most favorable state. This continued, and the child, a female, is also well.

DISEASES OF WOMEN.

Caneva's Proposed Operation for the Cure of Prolapsus Uteri.

The patient is placed on the operating table in a supine position, with the nates raised. A metallic sound is to be introduced into the uterus, so that the body of the uterus may be held against the anterior wall of the abdomen. The operator, standing on the left of the patient, makes an incision in the linea alba five centimetres from the horizontal branch of the pubes, extending for six or seven centimetres above the body of the uterus down to the peritoneum; with the handle of the bistoury or with the finger, he separates the peritoneum from the margins of the wound. The uterus being held in position by an assistant by means of the sound, the operator, with a fine needle and catgut unites the visceral to the parietal layer of the peritoneum. The abdominal wound is then closed; some points of suture, including the peritoneum, and antiseptic dressing, applied. Caneva does not consider the operation dangerous, and believes that the bladder would be only temporarily disturbed by the new state of things. He recommends this procedure in cases of grave prolapse, when pessaries are not well tolerated, and other methods of treatment have failed. Subsequent pregnancy, he thinks, would do no harm.—*London Medical Record*.

[One would think that the peritoneum was too delicate a structure to support a body as heavy as the uterus, but we will see what comes of this after a time.]

A. J. C. S.

For Leucorrhœa.

The oil of erigeron is an excellent remedy for leucorrhœa, many cases of which are associated with plethora; here iron is contra-indicated, and the oil of erigeron is the most suitable remedy, though in anæmic cases it is equally effective.

Restoration of the Perinæum.

Dr. GRAILY HEWITT (*Med. Press*):

The necessity for restoration of the lacerated perineal structures in cases of prolapsus uteri, the indications for the operation, and the best method of operating so as to ensure a satisfactory result have been very frequently discussed of late years. I am desirous of giving the results of my experience and observation on the subject.

The most important principle to be kept in view appears to me to be the necessity for building up the perinæum in a pyramidal shape, the base of the pyramid corresponding to the external surface of the perinæum, the apex of the pyramid being about two inches from the junction of skin and mucous membrane. Most operators at the present day have apparently had this principle more or less in view in designing their operations. The difficulty consists in procuring a sufficient thickness of the recto-vaginal septum between the edge of the perinæum and the apex of the pyramid just alluded to. For unless the floor of the vagina at a distance of about one and one-half inches from the outlet can be so approximated to the under edge of the triangular ligament as to offer an effective resistance to the downward impetus of the prolapsing structure (most frequently the base of the bladder in the first instance) the operation will be ineffectual.

In the year 1869, I described a method of operating which was intended to secure the object above expressed. I have since that time frequently practiced it, and found it reliable and satisfactory, and it has, I am able to say, been also found satisfactory by others who have given it a trial.

The paring of the perineal aperture itself is in this operation conjoined with removal of a triangular piece of the

vaginal canal about two inches in length. The whole can be removed in one piece by the scissors, and when ready for the sutures the bared surface presents an outline like that shown in the woodcut.

The plan I have adopted for securing union of the more internal part of the wound, which has been found in other operations a difficulty, is to use a stiff wire (No. 2) and approximate the edges by the post-mortem stitch (as shown in the cut), and when the wire has been inserted the wire is to be drawn tight into a straight line. The wire then acts as a splint. The upper end of the wire



is bent round and cut off; the lower end is easily dealt with. The deep sutures, also represented in the figure, are inserted in the ordinary way, great care being taken to bring the rectal wall into approximation with the new vaginal floor. This is a point requiring great attention, as the tightening of the vaginal floor suture necessarily separates the new floor from the rectum. The deep sutures are everywhere embedded in the tissues, and when tightened should produce concentration of the soft parts towards the centre of the pyramid con-

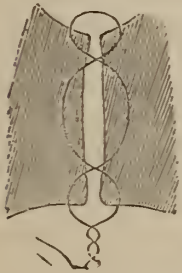
stituting the new perinæum. As regards the fixation of the deep sutures, I employ little vulcanite beads nearly one-half inch in diameter, through which the wire (No. 2) passes, and is securely twisted round a little projection of the ebonite bead. I consider approximation of the deep parts of the wound better obtained thus. The beads sink into the flesh, but do not obstruct the circulation or cause sloughing, as used to be the case with quill sutures. Superficial sutures of the ordinary kind are further required.

The internal floor suture generally works its way out, having accomplished its object; the deep sutures are removed after three days; the superficial sutures are removed later.

This operation in principle resembles most closely Savage's and Hegar's operation. Other operations in which flaps are raised and not removed, but readjusted so as to secure a somewhat analogous result in constricting the vaginal outlet, may possibly be preferable in certain cases when it is thought undesirable to run a risk of loss of substance on failure of success of the operation. The paring of the surface can, however, always be effected without removing much tissue.

The restoration of the perinæum in cases where the rectum is much involved in the laceration is more difficult. I may here mention that I successfully operated by a somewhat novel procedure on a case of this kind which was sent over to me from Ireland in 1883. The rectum was found torn for about two inches in length. An operation performed had failed, and the edges of the laceration retracted. I resolved to deal with the rectum and sphincter recti in the first instance. The edges of the rent were freshened and widely on each side, so as to give the recto-vaginal

septum a much increased thickness when the edges were brought together. The edges were approximated in a peculiar way by a series of separate sutures. Each suture was inserted so that when the insertion was completed its outline resembled a figure of 8 with a third enclosed space on the top of the figure 8. The woodcut annexed, showing the



wire inserted ready for tightening, will explain the object and action of this suture. The idea was to secure thus more completely coaptation of the central part of the opposed surfaces. The introduction of the

sutures in this manner occupied a little extra time, but the suture appeared to effect its object very perfectly. The ends of the sutures were fastened on the rectal surface. A series of six or seven sutures were employed. When these had been inserted the rectum was closed, and the perinæum itself was found to be very fairly restored, and further operation was therefore not necessary. This new method of suturing the opposed surfaces would be obviously applicable to ordinary cases where the rectum is not involved.

Leucorrhœal Discharges from Roller-Skating.

Dr. VON KLEIN says: "Mrs. L. consulted me about two of her little girls. Anna, aged ten, and Eva, aged twelve years. The mother called my attention to a leucorrhœal discharge which she lately observed on their clothing. An examination of the parts verified the mother's statement. I told her I could not account for it, as I had already seen it in children younger than hers, but the

lady, who is of rather extraordinary intelligence, advanced a theory that their recent excessive indulgence in roller-skating brought on their affliction. Certainly, I partly coincided with her sentiments. When she returned home and spoke to other ladies about the matter, it brought out the fact that there were many others afflicted in the same way. In fact, I examined nine children in forty-eight hours, whom I found affected with leucorrhœa. These children were all roller-skaters, from nine to sixteen years of age. Their mothers steadfastly maintained that they were not afflicted before they commenced the so-called exercise. I have reason to believe that the practice of roller-skating exercise is injurious to young females by reason of excessive movements of the lower extremities, especially of the pelvic organs, including the walls of the vagina. I trust the profession everywhere will record cases of this nature that may come under their observation, which will, I am sure, reveal many valuable pathological changes, caused by the exercise of roller-skating."—*Boston M. and S. J.*

Double Uterus and Vagina.

The *Phil. Med. and Surg. Reporter* published recently the following report of a discussion on this subject, before the Obstetrical Society of Philadelphia.

Dr. WM. GOODELL described a case which had been sent to him on account of pain in the back, various nervous symptoms, and difficult coition. The vagina was double throughout its entire length. Entrance had apparently been effected indifferently on either side of the septum. The cervices were united like the barrel of a double-barreled gun. There was a slight divergence of the upper third of the fundus. The sound entered three inches into each cavity.

The septum vaginæ was divided up to the cervix, and her physician reports great relief to the general symptoms.

Dr. C. McClelland described a similar case. Pregnancy had progressed to the third month when the case came under his observation. The vaginal septum was complete. The external contour of the cervix was normal, but a thin septum, extending from the os to the fundus, divided the cavity into two parts. The prominence of the uterus was greater on one side of the abdomen. The sound was not passed. The vaginal septum was divided shortly before labor. A living child was delivered. About the third day after delivery, a mass, apparently of decidua, was thrown off after three or four hours of labor pains. After involution was complete, sounds were introduced into the uterine cavities, and the handles diverged one and three-fourths inches. A second conception occurred afterward on the other side of the uterus.

Dr. Goodell had some years ago under his care a case which he at first diagnosed as an extra-uterine pregnancy, as he apparently found the uterus empty, passing the sound into it while undoubted signs of pregnancy existed. The foetal tumor was larger toward one side of the abdominal cavity, while the uterus was deflected to the other side. He saw the patient every two weeks, and made frequent careful examinations. He sent the patient to the University Hospital, and fixed a day for operation. One day while lecturing on the case, he had his hand on the abdomen of the patient, and felt a contraction and hardening under his hand. This so resembled the action of uterine tissue that he sent the patient to the Preston Retreat for observation. She was delivered spontaneously.

There was but one cervix and one os,

but there was a uterine septum higher up, dividing the cavity into two parts.

Dr. Harris remarked that the observer, in these cases, is liable to be deceived, because the enlargement of the uterus causes it to rotate, the empty half of the uterus admitting the sound in the median line. The uterus, too, is generally poorly developed, as this form of uterus is probably the result of arrest of development, and its thin walls do not give to the palpating hand the normal sense of thickness and resistance.

Intra-Uterine Therapeutics.

Dr. THOS. MORE MADDEN, (*Med. News*):

Methods of Dilating the Uterine Cavity.—It is essential for any intra-uterine treatment, in the first place, if the orifice and cavity of the uterus are not sufficiently patulous, they should be mechanically expanded; and secondly, whatever application is employed should be brought into actual contact with the true endo-uterine surface. These propositions may, perhaps, appear too evident to need any notice here. Nevertheless, failures in intra-uterine medication are generally due to their insufficient recognition, and hence a few practical observations upon these two points may not be superfluous. The dilatation of the cervical canal and uterine cavity in pluriparous women of lax habit, may in many instances be rapidly accomplished by Hagar's or Godson's dilators, or by Barnes' hydrostatic bags. But in other cases the most efficient method of effecting this is by the introduction of a sufficient number of solid laminaria bougies. Sponge tents, or the short sea-tangle or tupelo tents, still recommended by some authorities, and yet sold for this purpose, are all so unreliable in their action and so troublesome in their use, that for

several years he has ceased to employ them.

In using laminaria bougies, the length of the uterine cavity having been previously carefully measured, as many of them as can be packed into the cervical canal should be introduced as far as possible without actually touching the fundus uteri, and then broken off at the os externo, and left in the uterus from twelve to twenty-four hours, unless, from excessive pain or any sudden rise of temperature, it becomes necessary to remove them sooner, as is frequently the case. The cavity of the uterus will then generally be found sufficiently dilated for any purpose, and should be washed out with a warm antiseptic solution, after which the gynecologist, with a carefully carbolyzed hand, may proceed to explore the parts, and employ whatever local treatment is required.

In some few cases where a part of the cervical walls or the inner orifice offer a rigid, unyielding resistance to the necessary dilatation, we may be obliged to overcome the stricture by incision with a bistoury, cache or metrotome. These cases, however, are infrequent, and this expedient is not one to be adopted without absolute necessity and great caution.

Use of the Intra-Uterine Curette.—

With the view of ensuring that the intra-uterine applications reach the surface for which they are intended, Dr. Athill advises us to reserve such medication for the period of denidition, after menstruation. This suggestion, however, is not always feasible, nor has Dr. Madden found it necessary to postpone intra-uterine treatment merely to hit off the next period of denidition, inasmuch as for gynecological purposes we may sufficiently obtain the effect of this process by the removal of the unhealthy or hypertrophied endo-uterine mucous membrane by a suitable curette.

In some instances we may employ for this purpose the ingenious instrument invented by Dr. Duke, of Dublin, designed for a cervical curette, but which may also be employed within the uterine cavity. In most cases, however, a stronger instrument is required, and the writer, therefore, prefers his own modification of the curette, an "intra-uterine scoop." This was exhibited to the meeting, and is different in form as well as in principle, from any other instrument of the kind, as it may be set at any angle while in utero by a simple mechanical adjustment in the handle, and will thus scrape down the uterine wall in any direction without withdrawing the instrument, and having beveled and sharper edges than the ordinary dull wire curette, is more effectual in removing that pseudo-membranous albuminoid coating by which, in cases of chronic endo-uterine inflammation, intra-uterine medication is so much impeded, though in some instances, indeed, this pseudo-membrane also serves to protect the uterus from the over meddlesome zeal of rash and injudicious practitioners. However, our present purpose is to consider the use and not the abuse of intra-uterine therapeutics, and therefore we must consider the use of an uterine curette as in many instances indispensable, not only in the way just referred to, but also with the object of removing the granular, softened and diseased mucous membrane, so as to expose the true inner surface of the uterus to the action of whatever remedies we apply, and is, moreover, specially serviceable in cases of endometritis, from the local depletion its use occasions from the congested or hypertrophied parts.

Intra-Uterine Medication in Congestive Hypertrophy of the Uterus.—The majority of cases in which this local

treatment is resorted to are instances of congestive hypertrophy, the existence of which in any case is generally disclosed by obscure pelvic discomfort and sense of uterine fullness, displacements from the weight of the hypertrophied fundus, menstrual irregularities, especially menorrhagia or dysmenorrhœa, and uterine leucorrhœa. Besides these, in such cases some sympathetic disturbance of the general health are always present, and especially some one or more of the protean manifestations of hysteria or other nervous disorders, that are invariably connected with every form of chronic uterine disease.

It has been long and somewhat warmly disputed whether or not uterine inflammation has anything to do with the pathological conditions just referred to. This controversy, however, concerns terms rather than facts. What was formerly called chronic inflammation of the uterus, and is still so named by Dr. H. Bennet and others, or, as Dr. Athill terms it, endometritis, has long since been described by recent writers as chronic parenchymatous metritis, alveolar hyperplasia, chronic uterine hyperæmia, and perhaps more accurately by Dr. Emmet and other American writers as congestive hypertrophy of the uterus. Practically it matters little which of these terms we adopt, provided it be one indicating the necessity for treatment by which the vascular tissue of the engorged endo-uterine surface may be removed, whether by intra-uterine medication or otherwise.

Subinvolution of the Uterus.—However important in other respects, need not here occupy attention, as what has been said with regard to the last described condition applies almost equally to this. Endo-metritis or congestive hypertrophy may, of course, exist without subinvolution, but we can not pos-

sibly have the latter without the former.

Intra - Uterine Applications.—The most active of all the various agents employed for intra-uterine medication is fuming nitric acid, introduced into modern gynecological practice by Dr. Kidd, in the Coombe Hospital, and subsequently employed by Dr. Athill in the Rotunda and by Dr. Madden in the Mater Misericordiæ Hospital, Dublin, before it was thus applied elsewhere. For the intra-uterine use of nitric acid it is necessary that the os uteri should be dilated and exposed to view, the vaginal wall properly protected from injury with the acid, and the uterine wall drawn down to the vulva. For this purpose he has designed and used an uterine tenaculum which can be set at any angle, and instantly released from its firm hold on the cervix by merely turning the screw set in the handle. In this way the uterus can be easily swabbed out with strong nitric acid, the whole charge of which is thus expended on the endo-uterine surface, so as to avoid the risk of injuring the vaginal walls or external parts, though as an additional precaution these should be well smeared over with vaseline beforehand. Immediately after the application the uterus should be thoroughly washed out until no trace of acid is discoverable in the returning water, and finally, if any pain is complained of, a morphia suppository should be introduced. When thus employed nitric acid may generally be safely and effectively used in those cases of intra-uterine disease in which its application is really called for, and to which it should always be very carefully restricted.

Solid nitrate of silver was formerly in some vogue as an intra-uterine application, a small bit of it being introduced and left in utero in cases of subinvolution and even endometritis, even without

any preliminary dilatation of the os internum. This practice, however, is likely to give rise to local inflammation or metro-peritonitis.

Iodoform, in suppositories containing from 7 to 10 grains, will be found useful after more active treatment, in some cases of congestive hypertrophy of the uterus. Carbolic acid, and above all, iodized phenol, as well as the various other preparations of iodine, are, however, probably the most generally useful of all intra-uterine applications, and of these the Churchill tincture, or a solution of iodine in glycerine of the same strength as the ordinary tincture may be locally applied freely and with advantage in many cases of congestive hypertrophy, and also in some cases of intra-uterine tumors in which operative treatment is not permitted or is not advisable.

Of the injection of the tincture of iodine through the undilated canal, which has been recently again recommended for the same purpose, Dr. M. Madden speaks with some caution from his own experience of its use.

Intra-Uterine Tumors.—The treatment of intra-uterine tumors affords the most signal proof of the progress of modern gynecology. Not many years ago, a woman suffering from a large and rapidly increasing submucous or interstitial uterine tumor, was virtually regarded as being under an irrevocable sentence of death at no distant period, while now, a patient similarly afflicted, may be restored to health by a comparatively facile, bloodless and painless operation. We can not here, however, make any reference to the successive stages in the achievement of this result, with which the names, *longo intervallo*, of Ambrose Paré, Leveret and Simpson will ever be associated.

The scope of this paper does not

permit any further reference to this branch of intra-uterine therapeutics, unless it be to add that in the past few years the author has removed such tumors from the uterus in forty-two cases, of which four were intramural, eighteen submucous fibroids, and twenty were either pedunculated tumors or intra-uterine polypi. In one case six of these tumors were removed at one operation, and in another two large tumors, which had apparently coalesced from opposite sides of the womb, were taken away, and finally, in three of these cases the patients died, and in thirty-nine they recovered.

For Dysmenorrhœa.

Dysmenorrhœa is quickly relieved by thirty minims doses of liquid extract of hamamelis virginica in a little sweetened water, three times a day.—*Med. World.*

[The above statement would be a great blessing to many sufferers, if it were true.]

A. J. C. S.

DISEASES OF CHILDREN.

General Clinical Picture of Rachitis.

(*Jahrb. f. Kinderh.*, B. xxii., H. 3.)

Whether this disease has a premonitory stage or not, is uncertain. Three classes of symptoms have been observed which, in many cases, precede the discovery of changes in the bony system. (1) Disturbances in the functions of the extremities, or organs, such as inability to walk, convulsions, etc., this being the first notification to the parents that a morbid process exists. (2) Chronic disturbances of digestion, chronic respiratory catarrh following acute infectious diseases, or attending such chronic infectious diseases as tuberculosis. (3) Restlessness and sleeplessness at night without due cause, great tendency to sweating both by day and by night, fret-

fulness and disturbed nutrition manifested by emaciation and recurrent attacks of diarrhea. These symptoms may be present for weeks before any osseous lesions manifest themselves, or they may be entirely absent, or they may be manifested in connection with the rachitic phenomena. In infants the first changes in the bones must be sought in the cranium, jaw, anterior surface of the thorax, and lower half of the vertebral column. The neighborhood of the two fontanelles is the part of the cranium which is most apt to be first affected, or in general, those parts which have most recently undergone ossification. Soft spots in the bones are found at such points, while in the vicinity of bones which were ossified at an earlier period there may be hyperplasia and thickening. The next change which is observable is a pallor which is diffused over the skin, varied by a delicate blush upon the cheeks. The skin is smooth and thin, there is a loss of subcutaneous fat, and the muscles become deficient in tone and volume. The head loses its roundness of shape, the occiput becomes flattened, there is a saddle-like depression in the top of the head, the elevations being anterior and posterior. The brow appears abnormally high, and the countenance wears an expression of suffering or of meditation. The thorax is thrown upward and outward (pigeon-breast), the vertebral column is bent backward or laterally, the belly is abnormally large, and the pelvis is flattened. The extremities are backward in development, the bones being greatly thickened at the epiphyses, and in some cases bent and distorted. The teeth appear at abnormal periods and may be imperfect in texture. While the animal and vegetative portions of the economy are below par, the intellectual portion may be

brilliant. In general the child becomes weak and fretful, little able to help himself, suffering pain much of the time. He also suffers with chronic dyspepsia, indigestion, and constipation, alternating with diarrhea. There is also a tendency to catarrhal troubles of the bronchial tubes. The blood participates in the morbid process, as is manifested by the existing anemia, the spleen and lymphatic glands are swollen, and convulsions frequently occur. The disease is, therefore, not a local, not a systemic one, but a general one affecting the entire body. The older the child when he is attacked by the disease, the less severe, as a rule, will be its course.—*Arch. Pediatrics.*

Treatment of Ulceration of the Bowels in Young Infants.

Dr. F. P. ATKINSON thus writes in the *Practitioner*: The following case, which I have ventured to report, has given me an amount of information it might otherwise have taken years to obtain, and possibly it may prove of service to others who have cases of a like nature under their care. According to the mother's statement, the child in question had been given up by more than one physician, and I must say myself it was one of the worst cases I have ever seen recover. At the time the little one came under my charge she was two years and eight months old. She was a perfect skeleton, and quite unable to sit up in the nurse's arms. She had a sallow, waxy appearance, without a particle of color about her face except a slight hectic flush upon her cheeks. She was sick whenever she took food, which consisted entirely of milk and lime water. The bowels were moved about every four hours, and the smell was perfectly unbearable. The stools consisted almost entirely of slime and

pus, streaked with blood, and adhering to the bottom of the chamber-vessel even when it was held upside down. The stomach was slightly distended and tender. The previous history was as follows :

She was always rather sick from birth, but was worse after she was one year old. Had an attack of diarrhœa at eight months, and the urine was discolored (so the nurse says) with blood. She has always been troubled with diarrhœa on and off since. The stools were at first very large in quantity, and semi-solid, but not slimy. When the diarrhœa was at its worst, the actions occurred about every two hours, but the usual number of times was about once every four hours. The stomach was always more or less tender and distended. At twelve months old, she had pains in the joints, and one knee had to be put up in a splint; both legs were much swollen. The father had had syphilis before his marriage, but was said to be perfectly well when this took place. The child was nursed for about four months, but occasionally had a bottle of Swiss milk, then on account of sickness was fed entirely on Swiss milk and Savory & Moore's food for infants, till twelve months old, then all kinds of milk were tried, goat's, ass's, etc., and subsequently farinaceous food, with a little Brand's essence of beef. When I saw her she was taking cow's milk and lime water, and this was in great measure brought up as soon as it was taken into the stomach.

The indications for treatment appeared to me to give a light and easily digestible food, moreover one which, after digestion, would leave as little waste material as possible, to soothe the irritation of the bowels, and to improve the condition of the blood. As a diet, therefore, I ordered two tablespoonfuls

of whey, two tablespoonfuls of barley water, and one tablespoonful of cream to be taken at each feeding, and in the course of twenty four hours I found she managed to dispose of half a pint of barley water, half a pint of whey, a quarter of a pint of cream, together with, later on, one and a half ounces of milk. She also took in the twenty-four hours the white of four eggs beaten up in water, four teaspoonfuls of Brand's liquid essence of beef, and two ounces of finely minced raw meat. I ordered the body to be thoroughly oiled night and morning, the loins and stomach to be kept warm with a flannel bandage, and the feet to be well wrapped up. In order to alter the character and frequency of the secretions, I gave three times daily a mixture consisting of the following : One minim of solution of potash, eight minims of castor oil, three-quarters of a minim of tincture of opium, twenty minims of syrup of ginger, and half a drachm of mucilage. Then when the pus and slime began to pass away, and the bowels appeared simply relaxed, I gave two grains of bicarbonate of soda, three grains of subcarbonate of bismuth, half a minim of tincture of opium, five minims of tincture of catechu, two minims of tincture of rhubarb, five minims of compound tincture of cardamons, with a little syrup and mucilage, every four hours. Next, in order to improve the condition of the blood, as soon as the secretions began to improve, I ordered ten minims of the concentrated syrup of the lacto-phosphate of lime and iron to be given in water three times daily.

The child was ordered from the start to get plenty of fresh air, provided it was dry, and the rooms in which the child lived and slept were requested to be kept quite dry, and at the same time thoroughly clean and ventilated. In

the course of about one and a half years the child, under this treatment, made a good recovery, and was able to run about by herself and eat the same as any other child. The vomiting ceased almost entirely from the time that the milk was given up. Whenever the secretions became purulent and slimy, the castor oil and laudanum mixture was resorted to, and the carminative and astringent one when the bowels were simply a little relaxed. The castor oil and laudanum was successful in altering the character of the secretions not simply once or twice, but on several occasions, and I have applied it since in other cases with uniform success. As regards the lactophosphates, I cannot speak too highly of them in aiding the subsequent recovery.—*Med. & Surg. Reporter*.

Specific Medication for Whooping-Cough.

Dr. C. R. ILLINGWORTH writes in *The Lancet* :

I have found a popular remedy very efficacious in the treatment of whooping-cough. I refer to picked oakum, worn by the patient either round the neck in muslin, or on the chest as a pad stitched to the under clothing. Locally I apply the glycerine of tannin with a laryngeal brush two or three times a day, and internally I prescribe one, two, or three grain doses of chloral, one, two or three minims of belladonna, one grain of alum, and one minim of carbolic acid, in syrup, every two or three hours. A liniment of turpentine, acetic acid and yolk of egg, is an excellent application for the chest, back and neck, night and morning, with the liniment of belladonna added in the proportion of 1 to 7. In children of two years or more, I have applied carbolic acid and glycerine, in the proportion of 1 to 15, to the larynx with success, each application checking

a paroxysm at once. With the above mentioned treatment I cure the worst cases in from seven to ten days.—*Nashville Med. Jour.*

Gonorrheal Rheumatism in an Infant, the Result of Purulent Ophthalmia.

The writer, (*British Medical Journal*), in reporting the following case, is of the opinion that no connection between ophthalmia neonatorum and synovitis has ever been observed or described. If the synovitis of gonorrhea is due to the absorption of morbid products from the urethra, why may it not occur from the conjunctiva. The patient was eighteen days old, the seventh child, and was suffering from purulent ophthalmia of both eyes. The mother stated that about a fortnight before delivery she had a thick purulent discharge from the vagina. She had noticed that the left knee was swelled, and that the infant dropped the left hand and cried when these parts were handled. Effusion was found into the knee-joint, and also a synovitis of the wrist, which was swelled and creaked on motion. It seemed to the author scarcely possible for the simultaneous inflammation of these two joints to have any other explanation than that of a gonorrheal rheumatism.—*Archives of Pediatrics*.

Sore Throat in Children.

HENRY ASHBY (*Practitioner*), mentions four principal varieties :

1. Simple tonsilitis. 2. Scarlatinal tonsilitis. 3. Pseudo-diphtheritic. 4. Diphtheria.

Weakly and scrofulous children are especially subject to the first. It is oftener seen as a complication of alimentary disorders, as those of liver and stomach, than of the respiratory tract, as bronchitis and laryngitis. It frequently precedes rheumatic attacks. It

may be the result of the scarlatinal poison. In proof of this he cites an interesting series of eight cases occurring in a hospital ward within a few days. Several hospital nurses also took the disease. The first patient attacked, it was found, had been exposed to the genuine scarlatina a few days before. None of the cases had an eruption. One, a patient in previously bad condition, died. No unsanitary conditions prevailed.

In view of the difficulty—at times the impossibility—of diagnosing scarlet fever from simple tonsillitis, the writer recommends the isolation of all children with febrile sore throat as long as faucial congestion remains. The points in favor of scarlatina are: the presence of vomiting and diarrhœa in the stage of invasion; a pulse of 130–160; not necessarily a high temperature; marked injection of the uvular pillars of the fauces and tonsils. Later, the enlargement of the cervical lymphatics, with tenderness; the implication of the nasal mucous membrane, and a yellow exudation over the tonsils and uvula make the diagnosis of scarlatina tolerably certain.

Under pseudo-diphtheria the writer includes a class of cases which are said to bear the same relation to diphtheria that epidemic tonsillitis bears to scarlatina. It prevails where diphtheria does; is attributed to sewer gas and other poisons. They differ from it in that the cervical glands are rarely involved, the membrane is less tough, the nasal mucous membrane unaffected, the urine does not contain albumen, the usual sequelæ of diphtheria are absent. The prognosis is always good. The duration is rarely over a week.

The sore throat of diphtheria is differentiated from anginose scarlatina, by the fact that in the latter we rarely have

true membrane. A yellowish exudation may cover the tonsils, perforations and even sloughing of the palate may occur, and there may be much external cellulitis, but the feathery, whitish, adherent exudation of diphtheria is absent. The amount of albumen in the urine of scarlet fever is usually slight; in diphtheria it is often fifty per cent.—*Med. News.*

Treatment of Croup.

Dr. F. E. WAXHAM concludes an article published in *Chicago Med. Jour. and Exam.*, as follows:

1. A solution of pancreatin, with soda and glycerine, is the quickest and most satisfactory solvent.

2. Lime water in the form of spray is a rapid solvent of false membranes, but does not act as quickly as a solution of pancreatin.

3. The vapor of lime, however thoroughly applied, is entirely useless as a solvent.

4. Lactic acid is not a satisfactory solvent.

If I may be permitted to still further encroach upon your time and patience, I would refer, briefly, to tubing of the larynx.

I am convinced that the profession in Chicago, while they sanction tracheotomy, are not enthusiastic over it, and that they will gladly accept any substitute and give it a fair trial. Such a substitute has been proposed in the tubing of the larynx. To Dr. O'Dwyer, of New York City, belongs the great credit of originating this bold and ingenious method of treating croup. While the larynx has been tubed, from time to time, for laryngeal obstructions, yet none were bold enough to use tubes of sufficient length to drop into the trachea and to leave them in situ. Although occasionally performed, the

method was entirely different from that advocated and practiced by Dr. O'Dwyer.

We can see no objection that can be raised to this method of treating croup that does not apply to tracheotomy as well. True, the false membrane may extend below the tube and cause obstruction in the trachea, but this is just as likely, or even more likely, to occur after a tracheotomy.

The advantages of intubation are :

1. That with a little dexterity and practice it can be very easily and quickly performed and without danger.
2. We have no mutilation or disfigurement of the patient.
3. We have no wound that may be the cause of shock or that may be the source of systemic infection.
4. The laryngeal tube can be worn much more easily, with less irritation, than the canula after a tracheotomy. Coughing and expectoration occur just as easily.
5. It does not require the close and unremitting care of the medical attendant, as does a tube after tracheotomy.
6. The air that reaches the lungs is warm from its contact with the upper air passages, and not as likely to cause bronchitis or pneumonia.
7. Much less objection will be raised by parents against tubing.

OBSTETRICS.

Peculiar Displacement of the Arm in Utero at Birth.

Dr. EUGENE C. GEHRUNG. Mrs. L. L. F.; primipara; æt. 28 years; very nervous (terminating in a light attack of puerperal insanity); liquor amnii discharged completely the previous day at 11 o'clock, P. M.; pains began at 2 o'clock P. M., on January 1, 1885. First stage, 11½ hours; second stage, 6½ hours. The child (male) was born

at 7:30, A. M., January 2, weighing about 6½ pounds. Head presentation (L. O. A.), in which position the head was born, but when the shoulders presented, the head stood in R. O. A., position. This spontaneous semi-rotation from first to second position, and vice versa, is a movement which may be relatively often observed. The umbilical cord was not wrapped around the neck, as I ascertained by passing my finger from the thorax along the neck to the left ear. The space so crossed was found perfectly clear. The labor, though slow, was constantly and uninterruptedly progressing, and special assistance not called for. During a temporary lull in the pains, I proceeded to study the behavior of the shoulders in the process of their evolution, a subject which I had then under special consideration, and found, as intimated before, the left shoulder under the pubic symphysis, but though the shoulder was plump and round with a distinct axillary cavity underneath, yet there was apparently no arm attached to it. My first impression was that it might be the result of an arrest of development or of an intra-uterine amputation of the limb, but there being neither stump, nor cicatrix, nor rudimentary outgrowths present, I soon saw my error and searched for another explanation of the mystery. Passing my fingers from the shoulder towards the back of the child, a cylindrical ridge (the arm) was felt extending from the shoulder backward from left to right across the neck, where it terminated in a somewhat pointed body (the elbow) on the right shoulder, and there bending forward from right to left along the anterior part of the neck extended a similar ridge (the forearm) terminating in a hand, which rested on the thyroid cartilage. (See Figures I. and II.)

Then I understood that this was the missing arm. The anterior face of the whole arm and hand lay in close apposition with the neck all around, while the posterior surface was throughout its whole length turned away from the child. The hand rested under the chin, the palmar surface over the larynx, the palm was extended, the little finger turned upward and the thumb downward, toward the sternum. Meanwhile the child was born to the hips, to which followed

third of the humerus, in the position where the angle of the scapula should be, was a marked depression (A. Fig. II.) while the angle of the scapula itself was found in the spine near the vertebra prominens. The whole scapula had rotated on the subscapular muscles, partly dragging them along in its motion; the acromion process moving in the opposite direction to the angle, also carried with it the scapular end of the clavicle and thus caused the inclination of the



FIG. I.

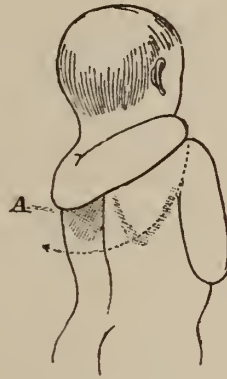


FIG. II.

another calm. I supposed, as seemed so very probable, especially in a head presentation, that the arm had slipped over the head from above downwards and tried to slip it gently back again, when I discovered to my surprise that it would not move in this direction. This aroused my curiosity to a still greater extent and I began to investigate the case in full earnest. The shoulder, or the clavicle and acromion process, formed an obtuse angle to the neck, instead of nearly a right angle in the normal condition; in fact there existed a pronounced slope shoulder, with a well preserved axillary cavity underneath. From the posterior border of the shoulder could be traced the arm extending around the neck as stated above, while underneath the middle

shoulder. On straightening the elbow and releasing the arm from the cervical depression, it was easily carried downward across the back from right to left, when everything resumed its natural position with a gentle snap. Before reducing the displacement I explained and showed the condition of the case to an aunt of the puerpera, who acted as nurse. Immediately after reduction I tried to reproduce the faulty position, using a moderate amount of force, but failed. This failure I ascribed to my want of knowledge of the exact mechanism of the primary process. The child used the arm and fingers just as well as those of the other side, almost immediately after the replacement. This case therefore was one of *spontaneous displacement of the whole arm from below*

upward over the posterior plane of the child, and during a head presentation.

The only description of displacements of the arm nearly resembling my case, I have encountered in Cazeaux's Midwifery.

In my case the accident was not probably a recent one, since the arm was not only comfortably lodged in the depression of the nape of the neck, and the elbow on the shoulder, but the forearm was flexed and snugly ensconced along the anterior part of the neck, and, so to speak, protected by the inferior maxilla. My case differs further from those mentioned by Duges, by having occurred in a cephalic presentation, and without any manipulation that could have produced such a result. Besides the distinguishing signs between these two modes of displacement mentioned by Duges, there may be added two more; though of lesser importance, they may be instrumental in recognizing the peculiar displacement when the others may be overlooked, namely, in the displacement of the arm from above downward the corresponding shoulder is elevated, while in displacement from below upward the corresponding shoulder is depressed. Secondly, in the former the axillary cavity is filled by the head of the humerus, while in the latter the depression is well preserved. Whether or not these will be of any practical use remains to be decided by future observation.

The labor was rather slow, considering the size of the child. The slow progress, which, by the way, was a constant, but uninterrupted one, I thought was satisfactorily explained by the total absence of the liquor amnii, though I now think the displaced arm acted to a certain extent as an impediment to a more rapid delivery. The first stage of labor was unusually painful, and in spite

of the administration of rather large doses of chloral, without a moment's intermission in the pains. The dry labor and consequent more or less intense contraction of the matrix around the irregular outlines of the foetus, and the absence of the dilating bag of waters, satisfactorily, though possibly wrongly, explained to my mind the existing condition. There was still another cause present to explain this state of things, and that is antelexion, with its usual sequels of protraction and painfulness of the first stage of labor, as explained in a former essay of mine.

How the displacement has occurred I am at present unable to explain. In fact, I have not even a plausible theory, though it must have happened by a peculiar combination of circumstances during the prenatal gyrations of the foetus. I shall therefore leave it to the fertile imagination of my patient hearers to devise an explanation, which, however plausible, may yet be wrong. When once the attention is aroused as to the possible occurrence of this peculiar displacement, it may be met occasionally and may soon be satisfactorily explained. Since it may have a possible relation to the production of this displacement, I shall mention that, after using Crede's method patiently for three-quarters of an hour, I was obliged to introduce my hand into the uterus and detach the placenta from a small point of attachment to the uterine wall and the membranes, which were extensively adherent, from within a diverticulum of the uterus.

The bearing of this contortion on the management of labor is almost insignificant, since the difficulties encountered during this act were sufficiently explained by other causes, and, were it known beforehand to exist, nothing could be done to rectify it. Version

would be worse than useless. Had the arm not been so completely protected by the opposite shoulder, the natural process of labor must have rectified the difficulty.

The only additional unusual condition I have observed that might lead to the supposition of the presence of this or a similar anomalous condition was, that during the passage of the head through the true pelvis, this (the head) was driven so forcibly towards the anterior plane of the fœtus (flexion), or the right sacro-iliac synchondrosis of the mother, that on completing the rotation for the passage of the inferior strait, it appeared for a time unavoidable that the head would pass through the rectum rather than the vulva. The occiput refused temporarily to adjust itself under the pubic arch, and a rupture of the perineum seemed, for a while, to be imminent, though with due care the labor was terminated without more than slightly nicking the posterior commissure.

Having seen from the foregoing description that this particular displacement of the arm produced little or no impediment to the progress of labor, a lesson may be learned from it:

1. That, should it occur again in a cephalic presentation, it should be let alone; only, good care should be taken to prevent rupture of the perineum, by urging the occiput well under the pubic symphysis; and,

2. Should it occur with a pelvic presentation, since the arm cannot be brought down, it appears to me that it would be best to try to bring the forearm over the opposite shoulder and apply it, if possible, against the anterior face of the neck; in fact, imitate this case completely, depress and rotate the corresponding shoulder (that of the displaced arm) toward the perineum,

thus the arm would offer the least resistance, and, as soon as the shoulders are born, could be freed from its malposition.

The Treatment of the Umbilical Cord.

In the *Medical Times and Gazette* appears an article by Drs. CREDÉ and WEBER (*Archiv f. Gynakologie*), the object of which is to consider: (1) The way in which secondary hemorrhage from the umbilical cord may be most surely prevented. The authors have made numerous experiments by tying the cord with various ligature materials, and then endeavoring to force fluid through the vessels, to find which kind of ligature most effectually occluded the vessels. They give the palm to the ligature recommended by Budin in 1880, viz., a piece of thin India rubber cord or tubing. They have devised an ingenious knot, of which they give an illustration; but it is so difficult to give a clear idea of it without the illustration, that we shall not attempt it. Tarnier has recommended tying the India rubber ligature over a match placed parallel with the cord, and then breaking the match at the point where the ligature encircles it and the cord. Formerly, a thin strip of linen was used in the Leipzig lying-in institution, with the result that scarcely a week passed without a case of secondary umbilical hemorrhage. The India rubber ligature has been used since July, 1883, and from that time to the date of the communication we quote (1884) there had not been a single case. (Budin, we mention, advises the India rubber ligature only in cases where the cord is exceptionally thick and friable.) (2) The next question they consider is the prevention of umbilical inflammation. The desideratum is a dressing which shall allow the process of desiccation and

separation to go on undisturbed, and protect the cord from traction, and the umbilicus from friction or other injury, and which shall be quite simple and easy of application. The dressing which best fulfills these purposes is simply wrapping the stump of the cord in absorbent cotton wool, and then leaving it loose underneath the "belly-band." This dressing should be changed daily. It keeps the cord dry, and allows the free access of air, which at the same time it filters from germs. It has been used for years in the Leipzig clinic, and diseases of the cord have never been seen. The authors compare it with several proposed modes of dressing the cord (Fehling's rags sprinkled with salicylic starch powder, the carbolic oil rag recommended in the Prussian midwives' hand-book, and Dohrn's antiseptic occlusive dressing) to the disadvantage of them all.—*Weekly Medical Record*.

Vomiting of Pregnancy.

Nausea and vomiting are very common symptoms belonging to the pregnant state, so common that women will frequently recognize the condition in which they are from these gastric phenomena, and they often do so before the cessation of the menses has given them a more reliable proof of their being pregnant. These gastric disturbances generally appear only during the earlier months, and, as a rule, cease as soon as quickening sets in. These symptoms, also, mostly are more annoying than dangerous, and usually easily controlled. And yet every physician occasionally meets with cases where the vomiting is not only incessant, but also unamenable to treatment, and, at times, cases happen where life is threatened. This is so well recognized that the law in Prussia permits, under such circum-

stances, the physician to induce premature labor.

Probably every remedy of which the least effect could be expected, has been tried in grave cases of this kind. For a while cauterization of the external os of the uterus was in fashion, and of late, stretching of the neck has been highly recommended. Dr. Adrian Schückling (*Allg. Med. Centr. Zeit.*, March 28, 1885,) has tried the latter operation in a series of cases, but found it invariably useless. Instead of it, he recommends the injection of carbonic acid, especially of those mineral waters which contain, besides small quantities of iron, a great amount of carbonic acid, into the rectum. In the article mentioned, S. reports a number of cases in which every known remedy—the operations included—had been tried in vain, and where life was really threatened, and where ultimately the injection of carbonic acid, in the form described, established a complete and permanent cure. As the presence of iron in these mineral waters does not seem to be essential, Apollinaris water may be the best to use in these cases.—*Med. and Surg. Reporter*.

Cocaine for Sore Nipples.

The latest application of cocaine is for tender and excoriated nipples. A five per cent. solution, brushed over the nipple, makes nursing possible and painless.—Dr. Andhoni, *Thérapeutique Contemporaine*.—*Med. Times*.

The Operation of Turning.

When you cannot find the feet of a child, in the operation of turning, reach for the fundus of the uterus, and when there open the hand widely and withdraw it slightly; the feet will then come into the hand of the operator. This operation is often facilitated by the knee-chest position.—*Med. World*.

DISEASES OF WOMEN.

How to Treat the Attachments of Uterine Tumors.

Dr. THOMAS KEITH, one of the highest living authorities on this subject, writes in the *British Med. Jour.*:

I have no one way in dealing with the attachments of uterine tumor. At present each case must be a law unto itself, and of this part of the operation there is much to be learned. A few of the simpler cases may be treated extra-peritoneally. Generally the broad ligament must be left inside, and sometimes the whole attachment, when there is much enucleation, must be so treated. Sometimes the treatment may be entirely intra-peritoneal by means of Kœberlé's *serre-neud*, or it may be half intra and half extra-peritoneal. These cases require much care in the after dressing, though the convalescence is much shorter than when the whole is left outside. I am hopeful that the cautery will yet be the safest and best of all the methods of dealing with some of these tumors. The more I use it in ovariectomy the more I like it. It is simply perfect, and its employment seems to me "a higher exercise of our art" than the ligature, which, apart from the chances of hemorrhage, embraces ten times the amount of tissue that is really necessary. That a more perfect way will soon be found, I have little doubt. This will do as much for uterine tumors as Baker Brown's intra-peritoneal method has done for ovariectomy ever since 1864.—*Obstet. Gazette*.

Novel Remedies in Dysmenorrhœa and Menorrhagia.

HUCHARD, of Paris, employed for several months the *virbunum prunifolium*, not only against the pains of

dysmenorrhœa, as recommended by Dr. Herr, of Philadelphia, but also as a general tonic of the nervous system. This action, Huchard thinks, is due to its containing considerable quantities of valerianic acid, combined with a bitter principle and tannic acid. *Viburnum* is used in doses of (1-6 grm.) 1 to 3 fluid drachms of the fluid extract or the tincture, and replaces advantageously, as an anti-spasmodic, the preparations of valerian. Huchard prefers the use of *hydrastis canadensis* to that of ergot, for uterine irregularities. The drug has, besides, as pointed out by Schatz, of Rostock, decided anti-catarrhal properties. This double action of *hydrastis* is due to the presence of two alkaloids, *hydrastine* and *berberine*. Its value in all catarrhal affections of the alimentary tract, the bladder, the urethra and uterus, is considered as firmly established. In the menstrual disorders it is to be given in doses of 40-50 drops of the fluid extract daily, during and preceding the week of menstruation. In dysmenorrhœa and menorrhagia, Huchard has used *hydrastis* and *viburnum* conjointly, with gratifying results, in doses of 10 drops every two hours.—*Journal de Médecine*.

Uterine Hæmatocele.

Dr. G. BERNUTZ, physician to the Charité Hospital of Paris, has concluded a lengthy paper on this subject in the *Archives de Tocologie*, in which he arrives at the following conclusions:

1. Uterine, or peri-uterine hæmatocele cannot be considered from a pathological point of view as a special disease; it constitutes simply an anatomico-pathological entity, which may give rise to a great number of diseases or diverse morbid conditions. It is consequently indispensable that the

subject be exactly defined, to avoid its being too complex or having its pathological history confused.

2. The denomination of uterine, or peri-uterine hæmatocele, should therefore be exclusively applied to sanguineous pelvic tumors contiguous to the uterus, and not really uterine, which have as their seat the peritoneal cavity itself; this excludes, 1st, what is called extra or sub-peritoneal hæmatocele, a thrombus of the cellular tissue of the broad ligaments and of the vagina as observed in the puerperal state; 2d, the pseudo-hæmatocele of pelvic hæmaturæ, in which the hæmatic extravasation is not contained in the peritoneum, but lies either in an extra-uterine abdominal fœtal cyst, or is intra-neo-membranous.

3. The name uterine hæmatocele should not be applied except to sanguineous intra-peritoneal collections which form tumors, and tumors that are perceptible to abdominal palpation and to the touch, that is to say, which are encysted. It cannot be applied legitimately to collections of blood that are free, floating in the serous membrane, changing position under pressure of the hand, and not giving the characteristic resistance of all tumors. This latter class should be defined as internal abdominal hæmorrhage.

4. Therefore a uterine hæmatocele requires two factors for its existence: An intra-peritoneal pelvic hæmorrhage, and the septum of the pelvic excavation; one may be the cause of the other, or they may occur at different periods. The hæmorrhage which engenders the hæmatoma may arise from this pelvic septum, or it may follow immediately upon a subacute pelvic peritonitis.

5. The mode which has for years been considered as the only one, is where the hæmatocele has as its initial

factor an intra-peritoneal pelvic hæmorrhage, which creates secondarily an encysted peritonitis. In these cases, where the pelvic cavity and the abdominal cavity proper are in free communication, and where, consequently, the vascular tension, not being confined by the walls of the cavity, is prone to distension, the sanguineous extravasation, by its abundance, causes cataclysmic symptoms, such as characterize internal abdominal hæmorrhage: and terminates fatally, either by the excess of blood discharged, by the development of a generalized peritonitis, or by the manifestation of serious functional disturbances caused by compression.

6. In a second mode of formation there preëxists, on the contrary, a septum of the pelvic basin, which constitutes after a time a closed cavity, whence it results that the sanguineous extravasation can accumulate but in moderate proportions, causing a comparatively benign symptomatology. The hæmorrhage which gives rise to the hæmatoma in this form may be from a lesion of the ovary (ovarian hæmatocele), a congenital or acquired atresia, complete or incomplete (hæmatocele by menstrual retention), an exaggeration of the secretion of blood from the internal genital organs (metrorrhagic hæmatocele), or an active neo-membranous congestion (hæmatocele symptomatic of a pachy-pelvic hæmorrhagic congestion) occurring suddenly, most frequently at a menstrual epoch or after a menstrual disturbance, with women in apparent good health, or affected with a hæmorrhagic diathesis, and the hæmatocele is established. In this variety there exists a special anatomical disposition, which is characteristic and consists in a repletion, associated with the pelvic

intraperitoneal hæmatocele, of one or both of the oviducts with blood.

7. In the third mode of formation in which most frequently there pre-exists a septum of the pelvic basin that is of some age, and may be incomplete, the hæmorrhage which produces the hæmatocele occurs in the course or decline of a sub-acute pelvic peritonitis, which constitutes a phase antecedent to the hæmorrhage, by favoring the multiplication of new vessels in the serous membrane. This occurs, generally, at a catamenial period, as a recrudescence of the inflammation of the pelvic serous membrane: it becomes at once of considerable volume, and immediately perceptible, and gives ultimately the progress and termination of an ordinary hæmatocele. This is the most common form of all.

8. Dr. Bernutz combats the well-known theory of Virchow upon the mode of formation of hæmatoceles, as being inexact and not sustained by his study of the subject. The very exceptional cases which respond to that theory, constitute an affection absolutely distinct from uterine hæmatocele, with which these intra-neo-membranous hæmatomata have but very remote relations, because there is, 1, as an initial factor a special chronic inflammation, hæmorrhagiparous, of the pelvic serous membrane, which is most frequently located on the posterior wall of the uterus; 2d, a slow, chronic and intermittent mode of formation; 3d, a baffling symptomatology, at present indefinite; 4th, as an anatomical characteristic, a special constitution, identical with that of the meningeal hæmatomata, which are symptomatic of pachymeningitis, which is entirely different from the anatomical constitution ob-

served in uterine hæmatocele properly so-called, in which the extravasation has for its seat the peritoneal cavity itself incrustated with false membranes, —*Jour. Amer. Med. Assoc.*

The Therapeutic Significance of the Cervical Follicles.

Dr. SIMEON BARUCH, of New York, in an article on this subject to the *New York Medical Journal*, concludes as follows:

1. A thorough knowledge of the anatomy, physiology and pathology of the cervix follicles will simplify the treatment of many uterine affections.

2. The cervix uteri represents a large gland of active and important functions in the various sexual relations of woman.

3. In the majority of the more common diseases of the uterus the mucous membrane and its follicles play the most important rôle. A recognition of this fact will make treatment more successful.

4. Metritis, subinvolution, hyperplasia, with catarrh, erosions, etc., must be studied in connection with the glands of the cervix.

5. In obstinate cases medicinal applications fail because the secreting surfaces of the follicles are not reached. Scarification and the curette are valuable adjuncts in nulliparous women or in parous women without cervix laceration.

6. In parous women without lacerations, trachelorrhaphy is the most valuable procedure. As a simple plastic operation it will not fail. Success depends on extirpation of the follicles, which is more important than the "removal of the cicatricial plug."

7. The microscope demonstrates the dependence of catarrh, ulceration, erosion, and hypertrophy of the cervix, and often also of the body of the uterus,

upon the glandular structure of the cervix uteri.

8. The cervical follicles are significant as elements in the pathology of cervix cancer, because the microscope demonstrates the dependence of the latter upon erosions, which are based upon the gland structure.

9. Laceration and erosion must be regarded with suspicion, as possible sources of future malignant disease. In operating for their removal, extirpation of the cervical follicles must be unsparing.

Laceration—Sub-Involution—Retroflexion.

The following is a portion of a clinical lecture by Dr. WM. GOODELL, published in the *Coll. & Clin. Record*:

She is a married woman, 25 years old. Her youngest child is two years old. She was well, up to the birth of her last child. The labor was a hard one, but instruments were not employed. She complains of difficulty in urinating. She nursed her child eighteen months.

You notice that she talks through her nose. That always awakes a suspicion in my mind of specific disease; but she says that she has had the cold in her head only two weeks, and that she has no eruption or bad sore throat.

She did not menstruate while nursing her child, but the menses came on shortly after meeting with an accident. This may simply have been a coincidence, or the accident may have furnished the exciting cause for the return of the menses. She says she "has a pain in the stomach," and when I ask her to put her hand on the spot, she places it over the left iliac region. We have an old English word, belly, and it would help us greatly, if this word were still in use, for I have often been led astray by a woman telling me she has pain in the stomach, when she really meant in her belly.

I will now see what can be determined with the finger. She plainly has a laceration of the cervix and ectropion of the mucous membrane. Just as there may be ectropion of the conjunctiva, so there may be ectropion of the mucous lining of the cervix. I expect, such being the case, to find this womb enlarged and probably retroflexed. I pass the sound, and find, not a perfect retroflexion, but a sinistro-lateral flexion. The womb measures three inches. I presume that the bladder symptoms are wholly due to the uterine troubles.

Now, as to the treatment. I shall, to-day, introduce this pessary, which is the No. 1 of Smith's modification of the Hodge pessary. This is the size most commonly required. I use this to support the womb. Having placed it in position, I determine whether there is sufficient space between the anterior bar and the pubic bone. There is more space than sufficient; but we shall begin with this instrument, and, if necessary, insert a larger one on another occasion. A pessary alone will not cure this case. I shall also order the following mixture: *R.* Infusi gentianæ comp., f. ʒvj.; potassii bromidi, ʒij. Solve. Sig.: a tablespoonful directly before or after meals. I order this, why? Bromide of potassium is one of the best so called anodynes for pelvic irritation. It relieves ovarian and uterine congestion and irritation. By giving it in the compound infusion of gentian, I partly conceal the taste, while at the same time I stimulate the digestion and increase the appetite. The next thing to do will be to make weekly applications to the cavity of the womb. I shall probably, also, order the fluid extract ergot and chloride of ammonium; twenty drops of the former and ten grains of the latter, three times a day. The ergot will cause the uterus to contract, while the chloride of

ammonium will stimulate the absorbents, and thus facilitate the return of the womb to its normal size.

Amenorrhœa producing excessive Vascular Tension.

MR. E. PAGET THURSTAN reports the case of a young lady, æt. 15, of delicate constitution, who had a severe attack of enteric fever. Six weeks after the attack began there were no unfavorable symptoms except that the pulse ranged from between 110 and 130. Repeated examinations of the lungs and heart failed to reveal anything abnormal. After a fortnight's treatment with digitalis and cinchona, the pulse was still hard, and ranged about 120. The dose of digitalis was increased from 10 to 15 minims of the tincture. A week's further treatment produced no effect. She was improving in all other respects, but the pulse still averaged 120. She had first menstruated a year prior to the fever. She had not menstruated since she was taken ill. He regarded these effects as due to the enteric poison. A month later, however, she menstruated once more, and the pulse at once subsided to 90.—*Brit. Med. Jour.*—*Jour. Amer. Med. Assoc.*

In the Treatment of Amenorrhœa.

J. K. SHIRK, (*Med. Record.*) I should like to call attention to an old but very much neglected remedy. I refer to the common smartweed or water-pepper, botanically termed *polygonum hydropiper*. Many years ago Eberle, in his work on "Materia Medica," pronounced it the most certain of all emmenagogues, but for some reason or other it is at present very seldom employed. This remedy has a special affinity for the female reproductive organs. I base this assertion on two facts: 1. It restores suppressed menstruation without producing any

disturbance or alteration of the general system. 2. It acts as a decided tonic in cases of chronic disease of the uterus and ovaries, and relieves many of the subjective sensations due to these disorders. The special virtue of smartweed in chronic uterine disease was discovered for me by a patient who had been suffering from suppressed menstruation, in connection with many other symptoms due to a diseased uterus. After the menses were restored, this lady continued the extract of smartweed for several months without my knowledge, but with a very favorable effect. The best and most convenient preparation of smartweed is the fluid extract. This may be given in the dose of a teaspoonful three or four times daily, commencing its use a week before the time for the return of the following period.

The Normal Position of the Uterus and its Relation to the other Pelvic Organs.

FRANKLIN H. MARTIN, M. D. (*Jour. Amer. Med. Assoc.*).

The extreme theories of Schultze, Fritsch and Savage were opposed for the following reasons:

1. In extreme anteversion, the wave impulse would strike the posterior broad surface of the body of the uterus, and drive it down upon the bladder and anterior wall of the vagina, while, on the other hand (the perpendicular theory of Savage), the anterior broad surface of the body would receive the impulse to an equal disadvantage, displacing the uterus backward and driving the cervix downward, while if the uterus occupied the position between these two extremes, the narrow crest of the fundus would receive the impulse in the line of the axis of the uterus and all the force would become equally distributed through all of its supports. Here, too,

the organ would not so directly receive the whole impulse, as it would be equally dispersed upon its sides and the posterior ligaments and anterior supports, and its lateral attachments would receive, to an equal extent, their portion of the impulse.

2. The manner in which the bladder collapses, to our mind, precludes the possibility, or at least the probability, of the uterus occupying normally the position of extreme anteversion. The bladder, when collapsed, or when empty, is a triangular shaped body, not flat like a plate. The base corresponding to its peritoneal surface, the apex corresponding to the urethra. The posterior or inferior surface corresponds to the anterior wall of the vagina, to which it is intimately attached; the anterior wall corresponds to the symphysis, to which it is loosely attached. It is readily seen, then, that the bladder distends only in the direction of the peritoneum, or its one free surface. According to the extreme anteversion theorists, the free surface of the bladder and the uterus are in apposition. If such be the case, the uterus changes its position constantly, as the bladder normally relaxes and contracts,—this seems to us very improbable. We believe that this space is usually filled with the light coils of the small intestines.

3. The broad ligaments receive their external attachments at a point about equidistant from the centre of the sacrum posteriorly, and the pubic junction anteriorly, in such a way as to divide the plane of the brim of the true pelvis into about equal halves. If the body of the uterus occupies a position in the centre of the pelvis on a direct line with the ordinary attachments of these ligaments, which it is at least rational to believe is the case, it occupies a position between the perpendicular of

Savage and the extreme anteversion of Fritsch.

4. With extreme anteversion, the cervix, with the fundus occupying a position behind the symphysis would necessarily have to occupy a position far back in the pelvis, within three-fourths of an inch of the sacrum—with a normal conformation of the parts, this is impossible without interfering with the rectum.

5. If we take the measurements of Foster and Litzmann into consideration, we can at once demonstrate the impracticability of the position given by Savage,—*i. e.*, the perpendicular. The cervix occupies a position normally at a distance of one and one-half inches from the sacrum, the rectum intervening. It is impossible for the uterus to assume anything like a perpendicular with the cervix in this position, on account of the anterior curve of the sacrum above, which necessitates an anterior version from the perpendicular of at least fifteen degrees.

Professor W. W. Jaggard was pleased with the selection of the topic, and its mode of treatment, but did not agree with Dr. Martin in all his conclusions. Bandl had made a correct statement of the diversity of opinion on this subject, in his essay on "The Normal Position and the Normal Relationship of the Uterus, and the Pathologico-Anatomical Causes of the Symptoms of Ante flexion" (*Archiv. fur Gynakologie, Band XXVI, Heft 3, 1884*), read before the Gynæcological Section of the Versammlung deutscher Naturforscher und Ärzte in Friburg, September, 1883. "In the course of time, almost every position of the uterus, with the exception of prolapse, has been accepted as the normal by different anatomists and gynæcologists, and particularly by the more eminent ones."

Kölliker (1882), from a series of ex-

aminations of the cadavers of girls, from ten to eighteen years old, has concluded that the uterus is not bent, nor curved upon itself, but is straight, and that its long axis corresponds with the principal axis of the small pelvis. Its position is variable within certain limits, depending upon the condition of the bladder and rectum. This opinion coincides closely with judgments of Kohlrausch (1854), Le Gendre (1868), Freund, Carl Braun (1857), J. Marion Sims (1855), Langer (1881). Professor Paul F. Mundé, in his recent excellent work on "Minor Surgical Gynecology," favors these views to the extent that he says, "with the woman in the recumbent position, the examining finger is unable to touch the body of the uterus before or behind the cervix, if the uterus is normally situated." Bandl, in the paper, to which allusion was made, confirms Kölliker's view. The evidence he furnishes is of a high order. His methods of investigation were: 1. The attentive examination of living women. 2. Examination and observation before and during the operation of laparotomy. 3. The bi-manual examination of the organ in cadavers, before and after abdominal section. 4. The comparative anatomical examination of many uteri.

Dr. Philip Adolphus thought, with Emmett, that "there is no common standard by which to determine the proper position for the uterus in all women, but that in each individual there is a point, or plane, in the pelvis which the uterus should occupy when she is in a state of health and not pregnant." He referred in detail to Emmet's "normal or health line," and to the pathological character of displacements above or below this line. It was a matter of relative insignificance whether or no the long axis of the uterus coincided

with any particular pelvic axis. In the concrete case the sensations of the individual would indicate a normal or abnormal position.

Professor Daniel T. Nelson said the uterus was fixed in a position of unstable equilibrium by the annular and other ligaments. It could move to a certain degree in every direction, and return to its original, normal position. Displacement above or below Emmet's "health line" was productive of symptoms, if the uterus remained fixed in such a position, as was usually the case when violence caused the dislocation. Departure from the principal axis of the pelvis was of comparatively insignificant moment, viewed absolutely. The vagina and perineum are not primary supports of the uterus, and only assume this function, when, as the result of the relaxation of the proper uterine supports, the organ is displaced downwards. This secondary character of the vaginal and perineal support was capable of demonstrating by the examination of a woman in the erect attitude. Upon coughing or sneezing the uterus would descend and receive support from vagina and perineum, only to regain its original position when the excitant was removed. This remark applied exclusively to normal organs in normal position. He wished to emphasize the statement that the rectum was not the normal receptacle for the fæces. Anatomy and physiology teach that in the normal condition the gut is empty up to the sigmoid flexure. The sigmoid flexure is a sort of valve to retain fæces.

He gave the history of a case of retention of urine in a puerperal woman, in which the bladder was displaced towards the right. He would like to ask the Fellows if this displacement, observed in a single case, corresponded with their observations.

Treatment of Leucorrhœa.

A common source of leucorrhœa is a weeping of the glands about the mouth of the uterus; and this condition we have found specially amenable to treatment by the use of Anderson's vaginal capsules, carrying absorbent cotton soaked in the following solution: $\mathcal{R}$. sodæ bicarb. $\mathfrak{z}$ j., tinct. belladonnæ $\mathfrak{z}$ ij aq. calcis $\mathcal{O}$ j. These capsules are composed of gelatine, and after this has dissolved, the impregnated cotton is left in contact with the os, and certainly has acted with perfect success in our hands, under otherwise adverse circumstances, the discharge having been old and persistent, resisting other methods of treatment.—*Med. World*.

Irritation of the Sexual Apparatus as an Etiological Factor in the Production of Nasal Disease.

The evil effects of undue excitation, or disease of the generative apparatus upon the organs of sight and hearing, are well known to specialists in these departments. In a very learned and interesting article in the April number of the *American Journal of the Medical Sciences*, Dr. JOHN N. MACKENZIE quotes authorities to prove that the fact that immoderate indulgence in venery may lead to derangements of sight, was familiar to Aristotle, and that the fathers of medicine recognized some mysterious connection between the ear and the productive functions, and that the intimate relationship between the genital organs and those of their throat and neck, attracted the special attention of the ancients.

Whilst historical facts point to the early recognition of the relationship between the over indulgence of the sexual powers and morbid conditions of the eye, ear and throat, the special part

which it plays in the production of nasal disease seems to have been overlooked, and Dr. Mackenzie has done good work in pointing out the intimate physiological relationship which exists between certain portions of the reproductive system and the erectile nasal tissue. Clinical observation has shown him that—

1. In a fair proportion of women suffering from nasal affections, the disease is greatly aggravated during the menstrual epoch, or when under the influence of sexual excitement.
2. Excessive indulgence in venery seems to have a tendency to initiate inflammation of the nasal mucous membrane, or to aggravate existing disease of the structure.
3. The same is true in regard to the confirmed habit of masturbation.
4. The co-existence of uterine or ovarian disease exerts sometimes an important influence on the clinical history of nasal inflammation.

These observations, therefore, encourage the belief, if they do not establish the fact, that the natural stimulation of the reproductive apparatus, as in coitus, menstruation, etc., when carried beyond its normal physiological bounds, or pathological states of the sexual apparatus, as in certain diseased conditions, or as the result of their over-stimulation from venereal excess, masturbation, etc., are often the predisposing, and occasionally the exciting causes of nasal congestion and inflammation. Whether it occurs through reflex action, pure and simple, or as the sequel of an excitation in which several or all of the erectile structures of the body participate, the starting point of nasal disease is, in all probability, the repeated stimulation and congestion of the turbinated erectile tissue of the nose. It is highly probable that this erectile area, so sen-

sitive to reflex-producing impressions, is the correlative of similar vascular areas in the reproductive tract, and that the phenomena may accordingly be explained by the doctrine of reflex or correlated action.—*Med. Age.*

Treatment of Pelvic Hæmatocele.

This affection is so comparatively rarely met with that we are apt to become rusty in the treatment, hence it seems well to reproduce the following remarks of Dr. ALFRED WILTSHIRE'S from the *Lancet*.

As to the treatment of pelvic hæmatoceles, the cardinal injunction in most cases is absolute rest and opium. The value of opium is here transcendent. It tranquilizes, relieves pain and enables the exhausted and collapsed patient better to bear the blood loss, while it compels repose, both mental and bodily. But to procure these desirable ends it must be given in full doses, and be repeated as may be necessary. The best method is to give it in one-grain doses of the solid opium, either in pill or powder. Next to solid opium, Battey's sedative solution of opium is good; but morphia is much less useful in these hemorrhages, especially in the cataclysmic forms. Ice and brandy, champagne, or other suitable stimulants may be requisite; and, above all, Valentine's meat-juice is most valuable. Peptonized meats and other foods (Benger's, Darby's, and others) may be useful adjuncts. In certain cases the hypodermic injection of ergotine of Tanret (Paris) may be helpful, and tincture of hamamelis may help in certain forms. The bladder should be relieved by catheterism with antiseptic precautions, as may be required. The use of astringents, such as gallic and other acids, is not great in these accidents, nor can I recommend the use of

heavy bags of ice to the abdomen. But besides medical treatment, certain grave surgical questions arise in some cases, and demand urgent solution; for example, in cases where there are reasonable grounds for suspecting the source of internal hemorrhage to be a ruptured tubal or other pregnancy, and in similar accidents, such as bursting of a vein in the pampiniform plexus or elsewhere, where the diagnosis is sufficiently clear; in short, in those cataclysmic intra-peritoneal bleedings where rapid dissolution is threatened, prompt operation may not only be justified, but become imperative to rescue the patient from impending death. It must not be forgotten, however, that even in ruptured ectopic gestations many patients recover without operation, as has happened several times within my own experience. The difficulty of accurate diagnosis is no doubt sometimes great, but not always; and when the well-balanced judgment arrives at reasonable grounds for belief that hemorrhage threatening to be rapidly fatal is going on unchecked from a controllable vascular lesion, then a bold, but not rash, interference is justifiable, and in these days of heroic abdominal surgery, laparotomy should be done without delay.

During the later stages of pelvic hæmatoceles watchful supervision of the patient is necessary. The bladder should be carefully attended to with scrupulous cleanliness and great gentleness. Bed-sores should be prevented if possible. The bowels as a rule should be seldom opened. The mouth often becomes sore from the glazy and raw condition of the tongue and lips, therefore all food should be bland. Sedative mouth washes give much relief (borax, myrrh, wine of opium, mucilages, and orange flower or rose water). The better patients are fed and cared for, the sooner,

does the effusion disappear according to my experience. Care should be taken to guard against relapses or exacerbations, which are apt to occur about the time of the next catamenial period. I have been able occasionally to predict a fresh effusion at these epochs; and when such happens, it is followed by fresh manifestations of hæmatic jaundice. There is periodicity about these forms of hemorrhage, and the explanation of effusions occurring at the intermenstrual or fortnightly periods is that it is part of a minor *nisus* that happens then. The condition of the vascular system will warn the physician, and the sphygmograph or finger may indicate increased arterial tension, while the eye can see the venous turgescence. Undue vascular excitement may be reduced by aconite, amyli-nitrate, nitro-glycerine, the bromides, etc. The pelvic viscera may be quieted by *actæa racemosa*, monobromide of camphor, Indian hemp, conium, gelsemine, and so on, given internally, and by vaginal pessaries of iodoform, conia, morphia, atropia, etc., or by rectal suppositories. An atmosphere of turpentine about the sick chamber is good, both for styptic and purifying influences. With reference to the puncture of hæmatocæles, I should, as a rule, deprecate opening, and would counsel caution in resorting to any operative measures. Should relief become necessary in the latter stages from suspicion of suppuration or decomposition of blood, or from clear evidence of intolerable or dangerous tension, then aspirate by the vagina and not by the rectum; but operation is generally undesirable, and should be carefully resorted to. During convalescence hot air and water will be found beneficial, and where absorption is tardy, poultices of scalded sea-sand and brine baths are essential.—*Med. and Surg. Reporter.*

DISEASES OF CHILDREN.

Infantile Convulsions.

DR. FRANK M. JONES (*Med. Summary*): I was called to see Rossie L., aged about fifteen months. The mother informed me that on the evening before, the child had vomited some, and about two o'clock in the morning it had another spell of vomiting and a severe spasm lasting about fifteen minutes. During the spasm the child discharged its feces in its diaper, which was saved for my inspection.

The child was nervous and restless, head hot, also the abdomen, pulse rapid, pupils somewhat dilated, the discharge from the bowels contained curdled milk and other undigested matter. Believing that the cause of the trouble was in the stomach and bowels, I gave the following: *R.* Hydrarg. chlor. mit., grs. iij.; soda. bi-carb., grs. ij.; pulv. jalap, grs. iv. *M.*

To be followed in four or five hours with a teaspoonful of castor oil, with two or three drops of turpentine, providing there was not a thorough evacuation of the bowels sooner. For controlling the pulse and nervousness the following mixture was given: *R.* Tr. aconit. rad., gtts. xij.; spts. ether nit., 3 j.; tinct. card. comp., 3 j.; syr. simp., 3 j.; brom. potass., grs. xxx.; aquæ, q. s., 5 ij. *M.* Sig. Teaspoonful every hour until five or six doses had been taken, afterwards teaspoonful every two or three hours, as indicated, to be followed next morning by the following (providing there was not much fever and no vomiting): *R.* Quiniæ sulph., grs. iss.; Tully's anodyne powd., grs. ij. *M.* Divide into chart No. iij. Sig. One every hour and a half. *R.* Lactopeptine (N. P. A.), grs. xxx.; bismuth subnitrate, grs. xx.; sacchar. lactis, grs.,

xxiv. Divide in chart No. xij. Sig. One three or four times a day in a little milk and water.

I informed the parents that the child might have another spasm, but told them I did not think there was cause for alarm, and that I would see it the next day. Saw child next day about twelve o'clock, noon; was informed that the bowels did not move until the oil and turpentine was given, that it had two more spasms on the evening of the 7th, but not so severe as the first one, and so soon as there was a free movement of the bowels there was a mitigation of all the symptoms, the child was in a good condition. Ordered the lactopeptine powders continued for a few days, also to give the fever mixture if indicated, and to be careful of the child's diet for a few days. It got along all right and there were no more spasms or further trouble.

Hæmorrhages into the Larger Cavities in New-Born Children from a Medico-Legal Point of View.

Hæmorrhage into the larger cavities of new-born children has not been considered to any extent by writers on legal medicine. Professor STADFELDT, of Copenhagen, being called upon to make a report in a criminal case, undertook the examination of the reports of births and autopsies at the Maternity Hospital of Copenhagen, during the past twenty years, during which time 25,000 births took place.

In this memoir, the author considers the hæmorrhages (ecchymoses) of the lungs and pericardium in the new-born. He notes that they are frequently produced at birth, and that, as they may continue for a considerable length of time, they should be looked upon with extreme caution as indications of suffocation after birth. Hæmorrhages of the

cranial cavity may sometimes be considered in legal medicine as the result of suffocation at birth, but they are principally due to traumatism during labor. The child may live perfectly well with these losses of blood, particularly when they are circumscribed on the surface of the brain, and even with considerable hæmorrhage the child may be quite well some time after birth. He cites three cases of serious effusion of blood about the kidney and in the suprarenal capsule, without injury to the vertebræ and without a recognition of the cause of the hæmorrhage. Retro-peritoneal effusion of blood was found extending all the way from the diaphragm to the pelvis. This occurred in three cases of presentation of the pelvic extremities, with extraction by the feet, and very difficult delivery. The hæmorrhages were probably produced during delivery, either by too great tension of the lumbar tissue, by direct pressure with the thumbs, or by raising the body too far while disengaging the arms.—*Nordiskt Medicinsk Arkiv.—Med. Assoc.*

Lead-Poisoning in Infants.

Dr. J. LOWEY reports three cases of lead-poisoning occurring in infants which deserve to be widely promulgated, especially among the laity, to avoid the causes leading to the intoxication.

1. A child of five weeks of age, nourished by a wet-nurse, was suddenly seized with violent colicky paroxysms, accompanied by a bluish color of the skin. The cause was found to be the lead-containing face-powder of the child's nurse.

2. Another infant of the same age showed similar symptoms, which were traced to the use of lotions of Goulard's extract by its nurse, which she applied to her sore breasts, without cleaning the

latter thoroughly before nursing her child.

3. An infant of three months of age was taken suddenly ill with distinct symptoms of lead-poisoning. An examination revealed that the nursing bottle used by the infant contained a lead cork, and that on account of a rupture in the rubber tube passing through this metal cork the lead came in direct contact with the milk.—*Wiener Medizinische Presse. — Therapeutische Gazette.—Ibid.*

Enuresis in Children.

We abstract a portion of an article by Dr. J. Lewis Smith, published in *Arch. Pediatrics* :

If, in the examination of a case, we discover no cause of incontinence, except an exaggerated contractile power of the bladder, and the urine is acid, from three to five drops of the liquor potassæ should be given three or four times daily in a wine-glassful of gum water, until litmus paper shows that the urine is neutral, and its neutral state should be maintained.

We possess an agent in belladonna, which diminishes the functional activity of the bladder, when the latter is in excess. It diminishes the contractile power of the muscular fibres, and its use is therefore indicated in the class of cases which we are now considering. In this country the tincture of belladonna is more commonly employed than the extract, which is more used in Europe, especially in continental Europe, and if obtained from a good laboratory its action is as certain as that of the extract, while its dose can be better regulated. Five drops of the tincture may be given every evening, or if the enuresis be diurnal as well as nocturnal, every morning and evening, to a child of five years, and the dose be in-

creased by one drop every second day if improvement do not occur, and physiological effects are not produced, until the dose is doubled, or even trebled. If the enuresis be relieved, or if, without its relief, physiological effects be observed, such as dryness of the fauces, cutaneous efflorescence or dilation of the pupils, the dose should not be increased. When belladonna produces the desired effect, it is no doubt best to continue its use for some time in the dose which is found to be effectual, and then to diminish the number of drops gradually.

Trousseau, who, as we have seen, considers enuresis in most cases a neurosis, highly extolled the treatment by belladonna, believing it the most effectual of all methods of cure. He prescribed the extract of belladonna, grain $\frac{1}{4}$, or sulphate of atropia, grain $\frac{1}{40}$, but he did not state the age of his patients. The dose was increased if necessary, and whatever dose he found to give relief was administered once daily for three, four, or five months, after which it was gradually diminished, but it was not discontinued until after the lapse of from two to ten months. By this treatment, Trousseau states, the majority of his patients were signally benefited, and not a few entirely cured. The following case, which recently occurred in my practice, indicates the mode of treatment in enuresis when it results from the cause which we are now considering. L., aged eleven years, male, had diurnal and nocturnal enuresis, which seriously interfered with the comfort of the patient, and rendered him an object of aversion and ridicule among his schoolmates. He had previously taken belladonna and other remedies without improvement. His urine was found highly acid. Four drops of liquor potassæ were ordered to be given

three or four times daily, and the tincture of belladonna, to which he was accustomed, was administered in nine-drop doses three times daily, to be increased, if need be, to fourteen or fifteen drops. The liquor potassæ, in the dose mentioned, immediately rendered the urine neutral, and the enuresis from that time ceased. This treatment, by neutralizing the urine and rendering it as little irritating as possible, aided by belladonna, which diminished the contractility of the muscular fibres, cured the infirmity, which had been most troublesome and tedious.

If the enuresis be due to an abnormally large secretion of urine, the cause may be such that something may be done to relieve the patient. The liquid ingesta in the latter part of the day should be restricted. If it be found that the increased flow be due to diabetes, or chronic nephritis, the enuresis, though an unpleasant symptom, is comparatively unimportant, and the grave disease, which causes it, requires chief attention. The quantity of urine may be diminished in diabetes mellitus by the use of proper food, and in diabetes insipidus by ergot.

In some instances, as we have seen, enuresis rebellious to the ordinary treatment, ceases when the irritation in parts contiguous to the bladder is removed. Phymosis, preputial adhesions, the accumulation of smegma between the foreskin and glans, with more or less balanitis produced by the foul products, anal fissure, vulvitis or ascarides, should, if present, receive treatment, and with the removal of the irritating cause the enuresis will probably cease.

If the enuresis be due to atony of the sphincter, a remedy is required which acts very differently from belladonna. If weakness of the sphincter be the cause, the indication is obviously to increase

its tonicity, and the two medicines which have been most successfully employed for this purpose are nux vomica, or its active principle, strychnia, and ergot. We have stated that the sphincter is more abundantly supplied with nerves than is the muscular coat of the bladder, so that those agents which restore innervation, and thereby increase muscular tonicity, act upon the sphincter more powerfully than upon the muscular coat. Ergot appears to exert a similar action, though perhaps less in degree, to that which it exerts upon the uterine muscular fibres.

We can obtain a clearer idea of the effect of therapeutic agents upon paresis of the sphincter vesicæ, by observing their action in paresis of the sphincter ani, for these two sphincters have similar functions. In a paper on incontinence of feces, published by Dr. Geo. B. Fowler, in the *American Journal of Obstetrics*, for October, 1882, two cases are detailed showing unmistakably the beneficial action of ergot in increasing the tonicity of the sphincter ani, and the same treatment is indicated for urinary incontinence when it arises from a similar cause. A child of seven years, in the practice of Dr. Fowler, had been closely confined to his studies, with probably some deterioration of his health, when fecal incontinence commenced. The tonicity of the sphincter ani, on examination with the finger, did not seem much impaired. Nevertheless it was so increased by ten-drop doses of the fluid extract of ergot that the incontinence was relieved. The second patient, an anemic girl of thirteen years, had been under treatment with iron and other tonics, without benefit to the fecal incontinence. Her flesh was flabby and surface cool, and, which is interesting to remark, as throwing light on the state of the vesical sphincter when it

lacks tonicity, a lack of resistance in the anal outlet was very apparent to the touch. A mixture containing fifteen minims of the fluid extract of ergot and grain $\frac{1}{100}$ of strychnia was given three times daily. At the end of the first week she had few recurrences of the trouble, and in three weeks was cured. Four months afterwards, although she had been taking quinine and iron, after the discontinuance of the ergot, a partial relapse occurred, and a suppository of five grains of ergotin with butter of cocoa was employed morning and evening. Immediate relief followed, the tonicity of the sphincter was restored, and the suppositories were discontinued after two weeks. The beneficial effects of ergotin in weakness of the sphincters was shown by these cases. Enuresis from weakness of the sphincter vesicæ could not have been better treated than by the same remedies, which relieved the fecal incontinence in these two patients.

OBSTETRICS.

Operation for Ruptured Sac in Extra Uterine Pregnancy.

MR. LAWSON TAIT'S statement, "That the great bulk of such cases (ruptured cyst of ectopic pregnancy) have a fatal termination when left alone," is opposed by an equally positive conviction, expressed by Professor Karl Schröder: "I, myself, so frequently see cases of tubal pregnancy, in which the diagnosis is positive, pursuing a favorable course, that I consider recovery as a regular termination." (Karl Schröder's *Lehrbuch d. Geburtshülfe*, Bonn, 1884, p. 422.)

If human opinion is of purely relative value, we are very decidedly of the persuasion that more importance should be attached to the dictum of the German

observer, as the resultant of greater experience and more extended observation, than to that of the distinguished surgeon of Birmingham. Regard the natural history of the condition:

1. The sac may rupture, but the egg may remain within and act as a spontaneous tampon. Such cases, with favorable terminations to the mothers, have been observed by Wiedersperg and Virchow. (Otto Spiegelberg's *Lehrbuch d. Geburtshülfe*, Lahr, 1882, p. 290.)

Operative interference under such conditions is plainly contra-indicated.

2. The cyst may rupture into the ligamentum latum with the formation of a hæmatoma. Schuchardt, and J. Veit (Virchow's *Arch.*, Bd., 89, p. 133. Die Eileiterschwangerschaft, von Dr. J. Veit, Stuttgart, 1884) have observed this termination. The embryo usually dies, and undergoes reductive metamorphosis, while hæmorrhage is checked by the pressure of the folds of the broad ligament. Primary laparotomy in such cases is obviously contra-indicated, unless the hæmorrhage is uncontrollable, or there is reason to believe the embryo will develop in its new location.

3. The sac may rupture and the fœtus escape into the peritoneal cavity, with the formation of a retro-uterine hæmatocele. Olivier, Leclerc, Schröder, Vignes, Gallard, Karl Braun, Veit, Chiari and others have observed this mode of termination. Hæmorrhage is a prognostic element of less serious import in these cases than peritonitis. Early operative interference is contra-indicated by the fact that most of these cases recover spontaneously.

4. The sac may rupture into the peritoneal cavity, and the life of the woman may be threatened by free hæmorrhage, or the resulting peritonitis. Fatal hæmorrhage even under these circumstances is seldom observed, according to Dr. J.

Veit, when rational expectant treatment has been practiced.

In the limited space at our command, we cannot discuss this interesting subject more thoroughly.

Finally, we desire to call the attention of the profession to the concluding paragraph in Dr. J. Veit's monograph, *Die Eileiterschwangerschaft*, as more in consonance with the present state of our knowledge, than the statements of Wiltshire, Lawson Tait, or Knowsley Thornton.

"Therefore, I advise, when the diagnosis of uncomplicated tubal pregnancy is made, the extirpation of the sac; in case of the formation of an hæmatocele, as in the death of the fœtus, rest and the expectant plan of treatment; in case of rupture of the cyst into the abdominal cavity, the compression of the abdominal aorta, etc., and only under the most extreme conditions to resort to direct arrest of hæmorrhage by laparotomy."—*Ed. in St. Louis Examiner & Journal*.

New Methods of Performing Cæsarian Section.

T. W. HINE states in the *Medical Chronicle*, that the opinions of Fehling, who has performed more successful Cæsarian sections than any other surgeon, are well deserving of attention. He prefers Porro's method to the classical, to Sanger's or to any other modification. The chief dangers in the old operation were of septicæmia, of profuse hæmorrhage during the operation, and of secondary hæmorrhage after it. All of these are avoided in Porro's operation. Between the publication of his method by Porro in 1876 and 1883, 150 cases of the new operation have been published, with a mortality of 55.8 per cent., against 88.90 per cent. with the old operation.

Muller's modification of Porro's operation, viz., withdrawal of the uterus from the abdominal cavity, and application of an elastic ligature, is considered as the best by Fehling. He advocates extra-peritoneal treatment of the pedicle as most likely to prevent secondary hæmorrhage, and he adopts Hegar's method of suturing the peritoneum below the ligature to the edge of the abdominal wound. Of five cases operated on in this way by Fehling, four recovered and one died of septicæmia. Sanger advised the excision of a portion of the muscular substance of the uterus below the serous covering, in order to be able to suture the serous membrane on both sides together. This is an unnecessary procedure, as the serous membrane is very distensible. Leopold has operated three times successfully according to Sanger's method; Benner once successfully. Fehling sees no advantage in Kehrer's horizontal incision above the os, instead of the usual vertical one. He condemns peritoneal drainage.

Any practicing surgeon may be unexpectedly placed in the responsible position of having to perform Cæsarian section. He should, therefore, be prepared to adopt the safest and easiest operation, which undoubtedly is Porro's.—*Weekly Med. Review*.

Vomiting of Pregnancy.

A glass of beer three times a day, with meals, is highly spoken of in the treatment of severe vomiting in pregnancy.—*St. Louis Cour. of Med.*

Bronchitis.

For a child with *bronchitis*, Prof. Bartholow prescribed—*R.* Syrup. picis 3 j. —ammonii iodidi, gr. ij. M., sig.—every four hours.—*Coll. & Clin. Rec.*

Electricity in Obstetrics.

Dr. W. T. BAIRD presents in the *American Journal of Obstetrics* the following tabulated comparison of ergot with electricity:

Ergot.

1. Action slow—no response until after 20 or 30 minutes have elapsed, thus losing time, thereby occasionally proving fatal to the patient.
2. Action uncertain; in some instances it will entirely fail to produce uterine contractions.
3. Action uncontrollable; it will sometimes "lash the uterus into a fury," which may produce laceration of the cervix or perineum.
4. Action always followed by shock, and sometimes by great exhaustion.
5. Action attended with danger, and always with an increase of suffering.
6. Action continuous, allowing no time for rest, thus violating one of the wisest provisions of nature.
7. It cannot be safely employed until dilatation of the os is well advanced; therefore its use is restricted to the latter part of the second and to the third stages of labor.

Electricity.

1. Action instantaneous, thus economizing time, and so in some cases proving of great value to the patient.
2. Action certain; it need never fail to produce uterine contractions.
3. Action under perfect control of the operator; therefore it may never endanger the integrity of the cervix or perineum.
4. Action never followed by either shock or exhaustion.
5. Action harmless, and always attended with a diminution of suffering.
6. Action rhythmical, "giving ample time for rest," thus stimulating nature.
7. It may be employed as soon as the first labor pains set in, and thus facilitate the labor in all of its stages.

Further on, in the same paper, the author gives the special indications for the employment of electricity as an oxytocic. He states that electricity may be deemed indicated in any case where it may be desirable.

1. To modify the pains of labor.
2. To favor a more rapid dilatation of the os.
3. To promote more vigorous uterine contractions.
4. To add tone and strength to all the muscles engaged, and "increase their power of doing work."
5. To abridge the time occupied by the labor.

6. To prevent shock, exhaustion, and post-partum hemorrhage.

7. To insure contraction of the uterus in cases of instrumental delivery.

8. To act as an auxiliary in the induction of premature labor.

9. To arrest hemorrhage, and accelerate labor in cases of placenta previa.

10. To prevent an undue expenditure of nervous force, in all cases of debility from whatever cause, thus leaving the patient in a condition to secure a speedy and favorable convalescence.—*Weekly Med. Review.*

DISEASES OF WOMEN.

Vaginal Hysterectomy for Cancer.

A. REEVES JACKSON, A. M., M. D.
This is a most valuable paper, in which the subject, in all its relations, is fully discussed.

The following is a brief synopsis of the author's views :

1. Any operation for cancer which does not completely remove the disease will be followed by recurrence.

2. During life, the diagnosis of the extent of cancerous disease originating in any part of the uterus, is at present impossible ; hence, no operative procedure can afford a guarantee of complete removal.

3. In view of this necessary doubt, no operation is justifiable which greatly endangers life, provided other and safer methods of treatment are available.

4. Vaginal hysterectomy has sacrificed the lives of more than one-third of those who have been subjected to it—the mortality of the operation when done by those of greater skill and experience being over 36 per cent.

5. Other methods of treatment, attended by not more than one-sixth to one-fourth the mortality of vaginal extirpation, are equally efficient in ameliorating the symptoms and retarding the progress of the disease ; and they have been followed by as good or better ultimate results. Hence, they should be preferred.

6. Vaginal hysterectomy does not avert or lessen suffering ; it destroys, and does not save life. It is, therefore, not a useful but an injurious operation ; and being such, it is unjustifiable, and to be abandoned.

Some Personal Observations on the Work of Lawson Tait.

Dr. VANDER VEER, in an article published in the *Med. Annals*, says :

Mr. Tait enters the room, and almost at a glance tells whether all required instruments are selected. He brings his bag of carefully prepared sponges and, counting them again, tells the assistant nurse their number, and she is held responsible for them. So also in regard to the number of forceps and other instruments.

The following is his method of preparing the sponges, and but one person is trusted to do this :

New sponges are first put into a large quantity of water with sufficient muriatic acid to make the water taste disagreeably acid.

They remain in this mixture until all effervescence has ceased and all the chalk is removed. For this purpose it may be necessary to renew the acid several times.

The sponges are afterwards carefully and thoroughly washed to make them as clean as possible, and free from every rough particle.

After being used at an operation, they are first washed free from blood, and then put in a deep jar and covered with soda and water (one pound of soda to twelve sponges). They are left in this about twenty-four hours (or longer if the sponges are very dirty), and then they are washed perfectly free from every trace of soda.

This takes several hours' hard work, using hot water, squeezing the sponges in and out of the water and changing the water constantly. Leaving them to soak for a few hours in very hot water greatly assists in the cleansing.

When quite clean, they are put in a jar of fresh water containing about one per cent. of carbolic acid, and after be-

ing in this for twenty-four hours, they are squeezed dry and tied up in a white cotton bag, in which they are left hanging from the kitchen ceiling (being the driest place in the house) till they are wanted.

His hospital bears every evidence of good plumbing and careful ventilation. No extra furniture is allowed in any room. Rugs in place of carpets are used, except in the halls and on the stairs, where carpets with matting may be seen. The rooms, by reason of brick partition walls, are exceedingly quiet.

In his operations he has a lady physician to administer the anesthetic (his preference he has already told us in a recently printed address), and one male assistant whose position is directly opposite him and yet who is seldom allowed to handle any of the sponges or instruments, only assisting when the abdominal walls are being opened, and in ligating the pedicle, apper.dages, or adhesions, depending upon the nature of the operation and its complications.

He operates standing at the right side of his patient, and has his instruments and sponges on the same side within easy reach.

Patient is placed upon a narrow table, legs and arms fastened in the ordinary manner, but no rubber protective used.

Carcinoma of the Cervix Uteri.

In a Clinical Lecture on this subject, DR. WILLIAM GOODELL, said :

The first case is that of a married lady, thirty-seven years old. She has had five or six children and some mis-carriages. A few months ago she began to lose blood and to have a discharge from the womb. She then went to her family physician, who diagnosed carcinoma. She arrived here yesterday, having come a long distance, to

see if something could not be done for her relief.

On examining per vaginam, I found that the disease had involved the cervix and the surrounding parts to a large extent. This is, unfortunately, the history of many of these cases. Women are so liable to have pains in the back and in the pelvic region that they often pay no attention to them. Bye-and-bye ? a hæmorrhage occurs, or they have a discharge of some kind, and then they seek the advice of a physician. Just here I want to disabuse your minds of one error : that is, that cancer is always accompanied with severe pain. Cancer of other organs is usually accompanied with pain, but cancer of the womb generally does not produce more pain than a retroflexion. Often it does not cause as much pain as a polypus. It is exceptional in my experience for a cancer of the uterus to produce pain, except when it has involved the internal os and passed into the cavity of the womb. Then it usually causes great suffering. The woman pays no attention to the slight pain she experiences, until the appearance of blood alarms her, and she seeks advice. By that time the cancer is an open sore, and little can be done for its relief, while if it had been seen earlier the physician might have been able to remove the diseased portion by cutting into a healthy part of the cervix and thus eradicate the disease.

In this case the cervix is wholly gone posteriorly, and the disease has gone so near to the rectum that I shall have to operate with great care in that direction, as I might possibly hasten a rupture into the rectum. Anteriorly, the cervix is all gone, except a small rim of tissue behind the bladder.

I told this lady frankly that her case was a hopeless one, except under one

condition, which I have had happen to me. That is, after the operation all the diseased tissue came away with the slough. I always like to hold out some little hope to these patients. My prognosis here is very bad. All that I can do will be to prolong life.

The operation that I shall perform will be to remove, by scraping, as much as possible of the diseased tissues of the neck. Here is the advantage of using one's left hand in these operations. Cancer of the womb is often very fetid, and the odor will cling to the hands for several days. I think that it is dangerous to deliver a woman after having soaked one's hands in the juices of a cancer, but having used my left hand here. I keep my right hand clean, for other work.

I shall take these fenestrated polypus forceps, and with them I can tear away a good deal of this tissue. These forceps should be supplied with the obstetric lock. The more boldly you work the less hemorrhage will there be. It is not often that I have much hemorrhage while performing this operation, but occasionally the flow of blood is profuse. The forceps are passed into the cervix, and catching the prominences, tear away as much as possible. Tearing off these fragments, I remove a bleeding and secreting surface. In this case the hemorrhage has not been great; there has been more discharge of mucus. I shall next use these gouge forceps, which have a cutting edge. I remove all until I come to the internal os.

What do I expect to gain by this operation? I expect to obtain a surface some portion of which will heal and become covered with a non-secreting surface. I cannot call it a healthy surface. This will lessen the amount of discharge, and then, by tearing away the

diseased tissue, I release the nerves from undue pressure and lessen pain, although that has not been a marked symptom in this instance. I am now working toward the rectum, and am going very cautiously. I feel here a hard cartilaginous septum, dividing the cervix into two parts. I have made a cavity in this cervix, so large that it will contain my four fingers.

I am not alarmed at the bleeding which we are having, for I know that I can pack the cervix and thus stop it, if it becomes too profuse. I have performed this operation many times, yet I have never had a fatal result. In one of the cases, as many of you are aware, while operating before you, I made a hole posteriorly, directly into Douglass' pouch, but I went on and completed the operation. The woman had a slight rise of temperature the next day or the next two days, but no more than usually follows this operation. She was able to go to her home, a long distance, in a week's time. I shall now take the curette and try to remove more of this diseased tissue. Posteriorly, I have almost reached the peritoneum. There is only a thin layer of tissue between my finger and Douglass' cul-de-sac. I cannot pass my finger into the cavity of the womb, and so I infer that the disease has not passed the internal os.

I have now removed a great deal of this cancerous mass. The next thing that I shall do will be to burn the site thoroughly with Paquelin's cautery. I take the cautery out once in a while, because the speculum becomes so hot that it might burn the tissues below. I have never had secondary hemorrhage following this operation, but I have had severe hemorrhage during it.

I expect that this patient will be able to return to her home in the course of from ten days to two weeks. After a

couple of days there will be a very bad smell, produced by this slough, and she will have to use permanganat of potassium injections. If there is any rise of temperature, quinia will be administered. She will probably have very little pain. Ordinarily, it is not necessary to give an anodyne, but I shall direct the nurse to slip into the rectum, as the patient comes to, a suppository containing one grain of the aqueous extract of opium. This will relieve the pain caused by stretching the perineum and the soreness in the joints, caused by the position in which the limbs have been held.

Now this patient will probably feel a great deal better. She will gain flesh, her appetite will increase, she will have less discharge, and I may have prolonged her life for a long time. I may have given her two years or more by this operation, but I think not. I think her life will be measured only by months.—*Col. & Clin. Record.*

An Improved Female Urethral Speculum.

Dr. T. A. ASHBY, *Maryland Medical Journal*:

The instrument represented in the cut here shown is an original Sims' Female Urethral Speculum, with several modifications, which give such decided advantages that a notice of the present instrument is not only allowable but proper. The instrument, as now perfected, seems to the writer to possess a working value not equalled by any speculum in use. The modifications given to Sims' original instrument have been devised by Prof. W. T. Howard, of this city, and by the writer, but the latter disclaims any credit for the improvement he has suggested, since it is of no great importance compared to the modification given by Prof. Howard.

Prof. Howard, with his characteristic indisposition to publish the results of his large and varied experience, has failed to bring this instrument before the profession, so that the writer feels warranted in calling attention to it. Having used a number of urethral specula without finding the facility and comfort in the use of any instrument which was desired, the writer, in conversation, mentioned this fact to Prof. Howard; whereupon this gentleman exhibited a speculum which he had had



made after the plan of Sims' instrument with an important modification of his own device. This modification consisted in substituting a sliding bar over the handles for the screw adjustment. The result was an instrument which admits of the most easy and perfect expansion and adjustment possible. The instant the handles of the instrument are compressed the sliding bar falls and the blades are fixed at any width desired. The dilating force is perfect and the adjustment as delicate as is possible to be secured. The operator is given im-

mediate and perfect control over the dilating blades. In using this instrument, so ingeniously modified by Prof. Howard, the writer was unable to find but one defect, which he has attempted to correct by the modification he has given it. It was found, in separating the blades, that the folds of tissue on either side of the urethral outlet had to be drawn out of view by the fingers, otherwise the orifice was more or less occluded. As it is inconvenient to use the fingers for this purpose, it occurred to the writer that metallic shields added to each blade could be made to do this work. Acting upon this suggestion he has had added the two shields shown in the cut, to the instrument modified by Prof. Howard, with the result of overcoming the only objection existing in his mind in regard to the great utility and value of the speculum. The cut represents the instrument so accurately that a further description does not seem necessary.

Spaying for Uterine Fibroids.

This operation, which was first performed by Dr. Trenholme, of this city, has been occupying the attention of the German Gynæcological Society, when Dr. Wiedow (Freiburg) presented a paper upon the subject. He gave a synopsis of sixty-three cases which had come under his notice, among which there were twelve deaths.

Prof. Hegar had operated twenty-one times, with three deaths. One of these fatal cases did well for six months, when renewed bleeding and enlargement of the tumor destroyed life. The remaining seventeen cases did well, being followed by cessation of the catamenia. Freud (Strassburg) reported six cases; in all favorable results were obtained, except one, where no benefit ensued.

In this case the tumor was of immense size, as in one of the fatal cases operated upon by Hegar. Hegar stated that on the average he regarded the operation as less dangerous than removal of the growth, but sometimes the danger was greater; when he found a good pedicle he preferred ablation when the tumor was large. In small tumors oöphorectomy is, in his opinion, a very effectual operation. Kaltenbach (Gissen) also reported two successful operations, but at the same time stated that the menses had continued in several cases after the removal of the ovaries. Hegar stated that cystic degeneration of large fibromas occurs even after normal cessation of menses, and the same occurs in cases after the climacteric is brought about by the removal of the ovaries. For this reason he regards the prognosis in very large fibromas as doubtful.

This discussion is of great value, as affording data for the selection of cases suitable for oöphorectomy—where the tumor is very large not only is the operation dangerous and difficult, but the after-results are so uncertain that spaying would seldom be a warrantable procedure. In such, not only may cystic degeneration take place, but menstruation may continue and so nullify the result of the operation. In one case of spaying operated upon by Dr. Trenholme, the menses have been quite regular and in every respect normal. This has been the case for more than six months. The future of this, one of the grandest of modern operations, would seem, as a rule, to be limited to these cases where the fibroid is small or of moderate dimensions, and where the climacteric is too far off to enable the patient to reach and safely pass that period.—*Can. Med. Record.*

Metrorrhagia.

Dr. J. E. FREE concludes an article in *Medical and Surgical Reporter*, as follows :

One of the commonest causes for metrorrhagia is exercise after child-birth. Subinvolution succeeds indiscreet conduct very often at this critical period, and the train of symptoms is as familiar as an old friend's face. Swelling, tenderness, pain in the pelvis and back, hemorrhage from the uterus, and jaundice, etc., etc., *ad infinitum*.

In such a case, the first thing to be done is to obtain rest.

If these two important considerations are attended to, namely, rest and the exciting cause, half the battle is won.

One of the most useful medicines in metrorrhagia is bromide of potash. Nothing is surer than the therapeusis of bromide of potash and ergot in cases where some of the trouble arises from a strained condition of the sensorium. Ergot, of course, is our sheet-anchor, but it is not always the *sine qua non*.

We have before now succeeded in relieving a patient of a profuse hemorrhage by the use of morphia and bromide of potash ; an overshadowing symptom in this case was cephalalgia, which yielded nicely in a few hours, and was shortly afterwards followed by the disappearance of the metrorrhagia, but worse than either was the itching eruption which appeared and obstinately hung on for a month.

Neither ergot nor the bromides should be used for any length of time, on account of their well known effect. It is our firm belief that more than one idiot in our asylums has been brought to his low estate through the use of this drug by the advice of medical men. An epileptic in this town has used a New York alienist's prescription for several years which contains several drams of

the bromide daily, and each time he visits his adviser the dose is increased.

Gallic acid in combination with ergot is also reliable in metrorrhagia, but one objection, and a powerful one by the way, is its disagreeable taste. One of our patients took one teaspoonful, threw her bottle away, and recovered promptly. No better astringent can be found than gallic acid in some cases of hemorrhage. Last spring we encountered a case of hemophilia, which baffled every combination of medicines suggested by several physicians, and finally was cured by forty grain doses of gallic acid. Viburnum has healing in its wings sometimes, but it is such a vile-smelling compound that we have abandoned its use wherever practicable. Quinine, ergotin, and ferri sulph. exsicc. with gentian, makes an excellent formula for pills to be used in metrorrhagia.

[We endorse all that Dr. Free says about removing the causes of menorrhagia. We notice, however, that he mentions only one cause—the least important—and omits all treatment except that which most frequently fails.]

A. J. C. S.

Evacuation of an Ovarian Cystic Tumor through the Intestines.

Dr. H. W. CARPENTER, of Oneida, N. Y., sends us the following interesting case : "Mrs. C. A—, aged thirty-two, married, and mother of three children began to decline while nursing her child, which was about one year old. I first saw her with her physician July 3d, and found her suffering from pain in back and right side. No appearance of tumor. Saw her again September 5th, and then found a right ovarian tumor, about as large as a child's head. Her general appearance indicated dis-

ease ; she was very weak and melancholy. Her physician had suggested that she go to New York for treatment, but she and her friends thought her too weak to bear the journey. She remained under his care till some time in January, when she commenced treatment with a doctor in Syracuse, who made an attempt to remove the dropsy by powerful diuretics. She constantly grew worse, and gave up all hopes of living, and early in February, Dr. Ure, living but a short distance from her, was called, who requested me to see her with him. She was then very much emaciated ; the abdomen being enormously distended. There was marked peritonitis on left side with general cyanosis ; and she was nearly pulseless at the wrist ; respiration labored and forty-five per minute. We were in some doubt whether surgical interference would be of any avail, but concluded the only hope of prolonging life would be to remove the contents of the sac, which we accordingly did, taking away thirty quarts, and a careful examination showed it to be seventy-five per cent. albumen. She rallied nicely after the operation, and in about six weeks there was perforation of the colon, as near as could be ascertained, at the sigmoid flexure, and the fluid that had slowly accumulated in the sac was discharged per rectum, and on May 15th the entire sac passed off. Very soon after the perforation the patient began to improve in strength and flesh, and is now able to ride five or six miles without becoming tired. With the exception of slight pain in the right iliac region she says she feels perfectly well."

An Ingenious Expedient.

Recently I was called to examine a woman who has had vasico-vaginal fistula for years. The sufferer has kept herself cleanly and comfortable by using

in the vagina a globular pessary made of compact sponge. The fistulous opening is near the urethral outlet ; and the pessary holds the false orifice so high that the urine can be retained for hours. The patient never urinates, but evacuates the bladder every three or four hours through the agency of a catheter—an instrument she has become expert in using. The expedient might possibly be adopted in some cases, where an operation for closure of the rent is not practicable. I commend the ingenuity of the woman who, unaided by even a professional suggestion, has kept herself from being offensive to herself and others.—*Eclectic Medical Journal*.

DISEASES OF CHILDREN.

The Treatment of Whooping-Cough.

In a clinical lecture on this subject, Dr. J. M. KEATING (*Philadelphia Medical Times*), states that he has obtained remarkable improvement in four cases of whooping cough by the use four or six times daily of a spray composed of : $\mathcal{R}$. Ammon. bromid. ; potass. bromid., $\text{āā } \frac{3}{4} \text{ i.}$; tinct. belladonnæ, $\text{f } \frac{3}{4} \text{ i.}$; glycerinæ, $\text{f } \frac{3}{4} \text{ i.}$; aquæ rosæ, q. s. ad. $\text{f } \frac{3}{4} \text{ iv.}$ M.

As the success or failure of the treatment depends so largely upon the thorough use of the spray, the *modus operandi* should be thoroughly understood. Dr. Keating does not use a tongue-depressor, as he finds that its presence will cause gagging in most cases. The child should open the mouth wide, as wide as possible, and then be told to breathe as deeply and rapidly as it can. This rapid breathing will not only carry the vapor into the larynx, but will also divert the child's mind and prevent that reflex spasm of the arches of the pharynx which is so likely to occur. The spray should be continued, if possible, for a minute, then the child

should have a rest, and again attack it, and so on for at least six or eight applications. The spray should be used before meals and just before going to bed. As regards the solution, although the above has answered most satisfactorily, it may be varied according to circumstances.

If the secretion be very scanty and tenacious, it would be necessary to use possibly the ammonium chloride instead of the bromides, with from four to six grains of acid. carbol. (cryst.) to the f ʒ iv. If the secretion be too profuse, the belladonna could be increased or alum added to the solution. To use the spray with good results, it must be thoroughly and frequently used, and also kept up for some days, even weeks, after the paroxysms have diminished or ceased.

In the cases above mentioned Dr. Keating also gave the following to bring about a good night's rest: R. Potass. bromid., ʒ i.; chloral hydrat., gr. xxiv.; Cybil's ext. carnis, f ʒ iii. M. (Any reliable fluid meat extract can be used.) Dessertspoonful in water at bed time.

Children will relish a cup of beef tea at night in this way. It is strengthening for them, and disguises admirably the salty pungency of the medicine which it conceals. They also took R. Quininæ sulph., gr. i.; syr. yerbæ santæ, ʒ i. M. Three times daily.

The syrup of yerba santa, used to disguise quinine, should be made *without the resin*. When made in that way it is an excellent vehicle.

The greatest difficulty is in the treatment of infants under one year with this disease. The use of the atomizer is of course very difficult, and it becomes necessary to substitute something for it. Belladonna stands at the head of the list. Dr. Keating gives it in two-drop doses of the tincture three times daily

for a child a year old, explaining to the mother exactly what is expected of it. If the night paroxysms are very severe, three drops can be given at night with the mixture of potass. bromid., gr. ii.; or a teaspoonful of lac asafœtida.

The symptoms of belladonna poisoning are dilated pupil, intense scarlatinous rash, and slowing of the respirations: indeed, the latter may be very alarming. On this account the belladonna should be given separately from any mixture, so that its dose may be regulated. In some cases it can be pushed until the pupils begin to dilate, in others the dose tolerated will be small.

The following mixture has been found excellent in some cases where the paroxysms are very violent and frequent, especially at night: R. Tinct. belladonnæ, gtt. viii.; vini ipecac., ℥ xx.; spts. ætheris nitrosi, ℥ xx.; aquæ, q. s. ad ʒ i. M. A teaspoonful in an equal amount of water, with a little sugar, and repeated in one hour, if required.

If the paroxysms are severe during the day, the secretion tenacious, and expectoration difficult, the following will often do well, with a dose of chloral at night: R. Ammon. carb., gr. viii.; syr. scillæ comp., ℥ xx.; *neutralize*, and add syr. toltan., f ʒ ss.; aq. aurant. flor., q. s. ad. f ʒ i. M. Dessertspoonful three or four times daily.

As the child constantly craves water, and if allowed to wait to satisfy its thirst for the time of nursing its eagerness will bring on a paroxysm, it is well to give it frequently a drink of sugared water with a pinch of bicarbonate of sodium.

Malaria in Children.

Dr. KINGSLEY, in *St. Louis Cour. of Med.*, says: In regard to treatment, but a word is necessary. Quinine, one grain three times a day, as prescribed

by our eastern friends, will not suffice for our western children. Our babies in the West often time require double and even three times the quantity. Nor does it matter much when the anti-periodic should be administered. It should not be given before the chill, if such should occur, as it might then tend to increase the gastric disturbance and thus not be absorbed. Frequently, owing to the nausea and vomiting, it cannot be administered, and if given will only increase these symptoms. In such cases an enema of the bi-sulphate of quinia will be found highly useful. Five or ten grains of this salt mixed with a teaspoonful of starch water is injected into the bowels each day.

In chronic cases, or cases that are not relieved by quinia, arsenic in the form of Fowler's solution, should be administered. Children bear arsenic very well. A child of five years can with safety take five drops of Fowler's solution three times a day. It is best to administer arsenic after meals. Iron, too, may be administered in combination with arsenic. Another advantageous method of administering quinia when it cannot be borne by the mouth, is byunction. A quantity is mixed with vaseline, and the ointment is rubbed into the body. The oleate of quinia is preferable; it should be applied thoroughly once a day. Sometimes the compound tincture of iodine, one drop in a little water every two or three hours, has succeeded where other remedies failed. Compound tincture of iodine and carbolic acid, four parts of the former to one of the latter, may be given in the same way. Where medicines have not been well borne, I have had good results from the use of the wet pack.

Cholera Infantum.

Dr. WATSON concludes an article in *Archiv. Pédiatrics*, as follows :

Treatment.—It will be advantageous to consider the treatment of cholera infantum under three headings, viz. : 1. Hygienic or prophylactic. 2. Dietetic. 3. Medicinal.

1. *Hygienic or Prophylactic.*—The infant should be removed from the influence of all the predisposing causes previously mentioned; when possible it should be kept in the country or by the seashore during the heated term; should it be impossible to keep it there all the time, it should be taken on frequent excursions on the water and into the country. See to it that the living room is kept clean, well-ventilated, and so that plenty of sunlight can enter it, if possible; keep the infant out of draughts, especially at nights. Give it a tepid bath, containing a little fine salt, night and morning, followed by gentle friction all over the body. Don't let it sleep in any of its day-clothes, but when they are removed at night have them hung up by the window so that they will be thoroughly aired in the morning. Flannel should be worn next to the skin, especially at night. Don't let it sleep on feathers; a hair or straw mattress, especially for the head, with an even smooth surface, should be used. Keep the head cool and the extremities warm. Avoid excitement, fright and continuous noises. If it is restless during the day, keep it out in the fresh air, which is the best as well as the most natural sedative. If restless at night with cool extremities, especially the feet, and a hot head, equalize the circulation by a hot mustard foot-bath. If the feet are usually cool, it will be advisable to constantly keep woolen stockings on them. Perfect cleanliness of body and linen should be scrupulously attended to.

2. *Dietetic*.—Infant feeding is one of the most important as well as the most intricate of problems we have to deal with in the management of young children. Time and space will not admit of extended details here. You will frequently be called to prescribe for young children, for whom your best and only prescription will be the regulation of the diet. No food has ever been made that will agree with all children. Some do well on one, some on another; so that you must find a suitable food for each case. Simplicity in the preparation of any food is of special importance.

There need be no question but that the mother's milk, under all ordinary circumstances, is *the* food for that infant, and in case where that is not obtainable, a wet-nurse will be next in value.

Next to human milk cow's milk is most available and easily prepared. The various forms of preparing it need not be mentioned here. At the present time the peptonized form seems most easily assimilated, though considerable care is necessary in its preparation, and difficulty in keeping it sweet during the hot weather might easily prevail.

One important point in the management of these cases should never be lost sight of—*i. e.*, not to overlook the stomach.

If the infant has sickened while using some one of the prepared foods, it would be advisable to try some preparation of milk, providing human milk were not obtainable.

During the height of the disease it will be proper to keep all milk away from the infant, unless it is at the breast. Ripley teaches that high temperature produces such changes in the gastric juice as to destroy its digestive properties. Kumyss in small and frequently repeated doses will often allay the thirst,

arrest the vomiting, and improve the character of the stools. Brush's is the best, when it is lumpy it should not be used. Gum water (3 j, gum acaciæ in 3 iv. water), flavored with a little lemon or orange juice, given with an equal part of carbonic-acid water will frequently be retained. The white of an egg beaten up in a cup of barley water and given in dram doses will act favorably in preference to anything else in many cases. Frozen beef tea has also been recommended. White wine whey, diluted, will frequently be retained and will be nourishing. It may be given in dram doses every hour or even half hour. The uncontrollable thirst due to the profuse serous flux causing an inspissated condition of the blood should be relieved either by some of the preparations mentioned above, by the sucking of ice tied up in a soft piece of muslin, or, even by small and oft-repeated doses of ice water. An enema of luke warm water, about a gill at a time, frequently seems of benefit in relieving this distressing symptom. It will be advantageous to add about one-quarter of a teaspoonful of fine salt to each enema, which can be repeated hourly. Oatmeal water, a cupful to a quart of cold water, allowed to stand for three or four hours and then filtered and flavored with orange juice, in teaspoonful doses, sometimes will be retained, and will change the character and frequency of the stools. Suggestions will arise in each case which can be used to advantage.

3. *Medicinal*.—That the therapeutics of cholera infantum have been eminently unsatisfactory is but too evident for the variety of remedies used and suggested. Vogel, questioning the absorption of medicine in the stomach or intestines, in these cases, on account of the strong exosmotic current which

takes place toward their mucous membrane, advises medication through the vagina, urethra, and bladder.

The indications are, to control the vomiting, check the diarrhea, reduce the high temperature, and sustain the strength of the infant.

It is not advisable to give carthartics at any time.

The use of the various preparations of opium is always attended with more or less danger. Some authors, however, commence the treatment with a full dose of opium, and then gradually decrease the quantity. It may, to a certain extent, control the spasmodic intestinal contraction, and perhaps in some measure allay the nervous irritability. If used in any stage of the disease it should never be given by the stomach, but either hypodermically or in an enema. Thus, in the stage of evacuation, two to five drops of laudanum in a gill of warm water may be used every two or three hours, or, as is very highly recommended by Eustace Smith, one thirtieth of a grain of morphia in five drops of ether may be used hypodermically and repeated in an hour if necessary. He relates one case where a child on the verge of collapse was treated in this way and recovered.

As a rule, all preparations of opium should be withheld when the pupils become contracted and symptoms of coma are apparent.

A poultice of one part of mustard to three parts of flour, made into a thin paste with hot water, placed over the dorso-lumbar spine, will frequently relieve the excessive vomiting and retching. Ripley speaks very highly of the use of chloroform, two to ten drops, according to the age, in an emulsion of of acaciæ, frequently repeated. He also uses it hypodermically when not retained on the stomach. Small doses

of creosote, chloroform and iodine in camphor water, repeated every half hour, or oftener if the first few doses are rejected, will often stop the vomiting. $\mathcal{R}$ —Cresoti, gtt., $\frac{1}{6}$; tinct. iodini, gtt., $\frac{1}{2}$; sp. chloroform, gtt. ij.; aq. camphoræ, 3j.

The iodine may also be used with bismuth and lime water, or chalk mixture. Small doses of carbolic acid in similar vehicles are recommended. Two drops of aromatic sulphuric acid with five drops of a solution (U. S. P.) of morphine is very well spoken of by Meigs and Pepper. Salicin, salicylate of lime and of bismuth, in three to five-grain doses have been recommended; also hypodermics of quinine and morphine.

Dr. Boardman Reed, of Atlantic City, speaks very highly of minute doses of corrosive sublimate in these cases. Calomel in one-twelfth grain doses, frequently repeated, has also been successfully used. Belladonna has also been successfully used. Theoretically, there are some indications for its use, *i. e.*, the peripheral anemia with engorgement of the vascular system of the gastro-intestinal canal. A combination of morphia and atropia, $\frac{1}{30}$ grain of the former with $\frac{1}{1200}$ grain of the latter, used hypodermically, would be beneficial.

A spiced poultice, made of two drams each of powdered ginger, cloves, and cinnamon, with an ounce of cornmeal, and moistened with whisky or brandy, placed on the epigastric and umbilical regions, and covered with oiled silk, seems to relieve the gastro-intestinal distress.

During this stage and especially in the stage of collapse, perfect rest in the horizontal position on a hair or straw mattress, with firm support for the head on a level slightly above the body, should be insisted upon in all cases

whether mild or severe. When the stomach will retain some one of the astringents, their use might be advisable to check the persisting diarrhea. Don't give too much medicine.

Scarlet Fever.

When lecturing upon *scarlet fever*, Prof. Da Costa mentioned the following agents as being of use: 1. carbolic acid, gr. $\frac{1}{2}$, a dose for a child 2 years old. Give in mint water. 2. Ammonium carbonate, gr. ij, every 2 hours, to child 10 years. 3. Potassium chlorate, $\mathfrak{z}$ j in water, Oj. Patient to drink this in 24 hours. 4. Salicylic acid when high temperature is present. 5. Small doses of chloral. Always keep skin active, and if heart be weak, give digitalis—if arterial tension be high, give aconite.

When such exudation has occurred, he prescribed, for its solvent action— $\mathcal{R}$. Ammonii chlor., gr. x., liquor. ammon. acetat., $\mathfrak{f}$ $\mathfrak{z}$ ss. M., sig.—every four hours.

If there is much depression, prescribe also, quinia and digitalis in combination.—*Col. & Clin. Record*.

Catarrh of the Intestines.

A child with *catarrh of the intestines*, was given, by Prof. Bartholow— $\mathcal{R}$. bismuth. subcarb., gr. v., creasote, $\mathfrak{m}$ $\frac{1}{4}$. ft. emulsion. Sig. every three hours.—*Ibid*.

Measles.

Of the treatment of *measles*, Prof. Da Costa speaks as follows: Do as little as possible. Tinct. aconit. rad. in neutral mixture, for fever, if necessary. Keep patient warm. Look out for complications. No need of prevention against its spreading. Better let the children of a household get the disease, and thus be safe against it when older.—*Ibid*.

Cough Mixtures for Children.

The following formulas are reprinted by the *Druggists' Circular*, from the hospital formulary of the Department of Public Charities and Correction, of New York City:—*Cough Mixture for Infants*. $\mathcal{R}$. tinct. opii. camph., spts. ammon. arom., $\bar{a}\bar{a}$ $\mathfrak{f}$ $\mathfrak{z}$ j, ext. ipecac., fl., $\mathfrak{f}$ $\mathfrak{z}$ ss, syr. pruni virgin., $\mathfrak{f}$ $\mathfrak{z}$ j, aquæ, q. s. ad $\mathfrak{f}$ $\mathfrak{z}$ iij. M., dose, a teaspoonful—*Mittura Ammonii Carbonatis*. $\mathcal{R}$. Ammonii carbonat., $\mathfrak{z}$ ss, syr. senegæ. $\mathfrak{f}$ $\mathfrak{z}$ iv., Syr. ipecac., $\mathfrak{f}$ $\mathfrak{z}$ ij, Syr. tolu, $\mathfrak{f}$ $\mathfrak{z}$ iv, ext. glycyrrhizæ, $\mathfrak{z}$ ss, aquæ cinnamoni, q. s. ad $\mathfrak{f}$ $\mathfrak{z}$ iv. M., dose, a teaspoonful for children. *Mistura Ammonii Chloride*. $\mathcal{R}$. Ammonii chloridi, $\mathfrak{z}$ ss, potassii chlorat., gr. xl., syr. senegæ, $\mathfrak{f}$ $\mathfrak{z}$ iv, syr. ipecac., $\mathfrak{f}$ $\mathfrak{z}$ iij, syr. tolu, $\mathfrak{f}$ $\mathfrak{z}$ v, ext. glycyrrhizæ, $\mathfrak{z}$ j, aqua cinnamoni, q. s. ad $\mathfrak{f}$ $\mathfrak{z}$ iv. M. dose, a teaspoonful for children.

Schultz's Method of Resuscitating the New Born Child.

At the last annual meeting of the Medical and Chirurgical Faculty of Maryland, Dr. NEALE (*Medical Record*), illustrated Schultz's method of resuscitating the new born child in case of asphyxia. The child is held by the shoulders, the thumbs resting upon the thorax, the child's head toward the operator, and its anterior surface to the front; it is then swung upwards so that its feet perform a revolution, and lie between the head and the operator's body, the trunk being then in a state of forced flexion. The original position is then resumed by a reverse movement, and the repetition of these movements constitutes the method. Dr. Neale regarded it as more effective than Marshall Hall's or Sylvester's, and related a case in which resuscitation had been secured after ten minutes, the measures mentioned and all others having been tried in vain.

OBSTETRICS.

Malaria and Pregnancy.

Dr. G. C. NIJHOFF, of Amsterdam, discusses, in the *Weekblad*, the question of the relation of malaria to pregnancy, adducing some observations of his own. Some years ago it seemed to be the general opinion that pregnant women were rarely affected by malarial fevers. Thus, Griesinger (*Virchow's Handb. der spec. Path. und Ther. Infections-Krankh.*, 1856) found that, during the prevalence of a quartan fever in Prague, only 2 out of 8,636 pregnant and parturient women were affected. Again, Crédé states (*Monatsch. für Geburtsh.*, Band xv., S. 1, 1860) that, in Leipsic, during the three years 1856-1859, there was scarcely a case of tertian ague in a pregnant woman. Mendel and Ritter have also recorded the comparative immunity of pregnancy from malarial attacks, for which the latter accounts by the smaller degree of exposure to malarial influence during pregnancy. When, however, it does occur, it does not, according to both Mendel and Ritter's observations, exercise any remarkable effect on the course of the pregnancy. On the other hand, Goth, of Klausenburg, found (*Zeitsch. für Geb. und Gyn.*, Band vi., S. 17, 1881) that, during a severe epidemic of a malarial nature, 46 out of 881 pregnant women were attacked; and of these 46, in 19 the labor was premature, and in some the children were still-born, and, even when they were alive, the size and weight were abnormally low. Bombani also (*Centralbl. für Gyn.*, 1834, S. 821) is of opinion that malaria causes more premature labors than syphilis.

The discordant views of authorities, of which the above may be taken as an example, extend also to the treatment which should be adopted in the malaria of pregnancy; some, as Cazeaux, ad-

vising that quinine should be given as the surest preventive against abortion; while Petijean (Charpentier, *Traité des Acc.*, Tome i, p. 562, 1833) and Monteverdi consider that quinine is a powerful ecboic; the later thinks it even more active than ergot.

The writer mentions particulars of four cases, in which malaria attacked pregnant women, quinine being given. In one of these the labor came on five weeks before the calculated time; but the child was of full length, and it was uncertain whether it was really premature. In another case the labor occurred at about the right time, but immediately after a severe attack of fever; the weight of the child being 2.8 kilogrammes (about 6lbs. 2½ ozs.). The other two pregnancies terminated normally, with healthy children.

With respect to the mutual effect of malaria and the process of labor, Ritter was of opinion that labor tends to arrest a malarial attack, suggesting, as an explanation of this, that the hemorrhage may perhaps account for it. Goth considered that labor is prolonged by malaria to double its normal length, and stated that artificial assistance by forceps or extraction of the placenta was requisite more often than in cases uncomplicated in this way. The writer's own observations induce him to agree with Ritter rather than with Goth. In one of his four cases, the malarial attack did not return for twelve days after the labor, and in two more cases the patients were free for fourteen days after labor. In all these cases the labors were normal, with very little hemorrhage.

It is, of course, often difficult to diagnose malaria in the puerperal state. Ritter believed that puerperal women are peculiarly susceptible to malaria, but that they are less exposed to its influence than other people. He, how-

ever, mentioned fourteen cases, of which only three had had attacks during the pregnancy. He also thought quinine less satisfactory in its results than usual, owing to the enfeebled digestive power. The author's experience of puerperal malaria is very limited.—*Brit. Med. Journal*.

[It would be interesting to know whether the cases of Goth and Bompani were treated with quinine. If so, the question would arise, was the premature labor the effect of the disease or the drug? We recently had occasion to exhibit fifteen and twenty grain doses of quinine in a severe and obstinate intermittent in a primipara. In a few days, the patient was seized with a dangerous flooding, and gave birth to the child. Shortly before the occurrence of the hemorrhage, I had been summoned to the patient, and found the uterus in a state of almost constant and rigid contraction.

I have for several years used ten grain doses of quinine for inertia uteri in the second stage of labor, and have no doubt of its value. From the above and other similar experience, I believe quinine to be an ecbotic.] J.

Diseases of the Placenta and Cord Caused by Syphilis.

DR. SAXINGER (Tubingen, 1884) has published the results of his studies of this affection, with the following conclusions:

1. There exists a placental syphilis, which, in a fair proportion of cases, is recognizable on macroscopic examination.

2. Placental syphilis generally accompanies foetal syphilis. It is also found in maternal syphilis with a healthy child.

3. The placenta may be diseased in an isolated lobe and throughout its

density, or solely in its foetal portion, or its maternal portion.

a. If the mother has been infected by the fecundating coitus, with the foetal syphilis, the placenta is found to be more or less diseased throughout. Ordinarily, the umbilical vessels themselves are diseased.

b. If the mother is not infected, generally, besides the foetal syphilis, only the foetal placenta and the cord are diseased. Nevertheless, the morbid process may extend to the maternal placenta, and infect the mother by intra-uterine reperussion.

c. If the mother has been infected some little time before conception, if the mother has been fecundated by a healthy man before the outbreak of general symptoms, and if she has undergone treatment during pregnancy, a healthy child may be born to her. Here the maternal portion of the placenta is generally the only one diseased.

d. If the mother has been infected some considerable time before the fecundating coitus, ordinarily it is the placenta alone which is diseased. Under the influence of the progress of the morbid process, the foetal placenta and the whole of the placenta may be involved in turn, and the foetus participate in the infection, if indeed, from the disturbance of the circulation, it is not destroyed.

e. If the mother is fecundated by a healthy man, and if she is not infected until later, in spite of the immunity of the foetus, the placenta is alway diseased, however slightly. When the mother is syphilitic, the placenta does not escape, unless the mother be infected at a period very near to her time of delivery.

4. It is not proved positively that a woman can be infected by the passage of a syphilitic child through the genital

organs, nor that a child can be infected during delivery.

5. Experience shows that children conceived during the first years of acquired syphilis, or badly treated syphilis of the parents, die during intra-uterine life, or are born non-viable. A mercurial treatment, which is well directed, may interrupt this transmission at all periods, or maintain a condition that is latent for years. If syphilis remains so latent in an organ, it is possible, after appropriate mercurial treatment, to see healthy children born, and later syphilitic children.—*Archives de Tocologie*, June, 1885.—*Jour. Amer. Med. Assoc.*

How soon after Exposure to Sepsis may the Accoucheur resume Practice.

The great bulk of obstetricians and surgeons to-day, among whom may be mentioned Emmett, Battey, Goodell and Thomas, in this country, and Martin, Schroeder, Volkman, Nussbaum and Esmarch, in Europe, believe that time is not essential, and that thorough disinfection is only necessary. So confident is Volkman of the truth of his belief, that from work upon the cadaver he goes to operations of all sorts, and from fetid abscesses and erysipelatous cases he goes directly to obstetric cases. He says, unconditionally, "I have never infected a patient."—*St. Louis Med. and Surg. Jour.*

Lateral Incision for the Prevention of Rupture of the Perinæum.

Drs. CREDE and COLPE, of Leipzig, are the authors of a paper on this subject, which appears in the *Archiv. fuer Gynakologie* (Band XXIV., Heft 1). They discuss the practice of incising the perinæum laterally in order to prevent its tearing centrally. The objections brought against it are these :

1. That the incision becomes an

ulcer, and disturbs the healthy course of the lying-in. This they prevent by bringing the edges of the incision together by suture, with the result that primary union almost invariably follows. They have devised an ingenious method for applying this suture, but without the assistance of diagrams it is difficult to make this understood ; we must therefore refer our readers to the paper, where they will find illustrations that make it perfectly clear.

2. That germs of disease may enter through the wound. In this respect the prospect is no worse than that from a torn perinæum. Injury to the perinæum only to a slight appreciable extent increases the lying-in woman's chance of disease or death. Out of 2,000 deliveries in Leipzig, among those with uninjured perinæums the death-rate was .954 and the morbidity 2.94 per cent.; among those with torn perinæums the mortality was .934 and the morbidity 3.24 per cent.

3. That the incisions do not invariably prevent perinæal rupture. To meet this the authors give a table of the percentage of cases in which lateral incisions were made and of those in which rupture of the perinæum occurred in the practice of five different assistant physicians; and the table shows that the frequency of incision and the frequency of rupture stood in inverse proportion to one another. They also state that since incision has been practised not a single case of complete perinæal rupture has occurred.

4. That the cutting is painful ; to which the authors reply, that it is done when the patient is already in much pain so that she does not notice it.

5. That it leads to subsequent gaping of the vulta. This our authors deny. They believe, in short, that the lateral incision is extremely useful and absolutely harmless.

We may add, in order to give an idea, of their practice, that in primiparæ, lateral incision was practised in 25.9 per cent., spontaneous rupture took place in 10.4 per cent., and rupture in spite of incision in 2.9 per cent. In multipara, the corresponding figures are: lateral incision, 1.2 per cent.: spontaneous rupture, 2.4 per cent. They give figures also which show the influence of perineal ruptures in causing illness during the lying-in period. The percentage of primiparæ, whom it was necessary to keep in the hospital longer than a fortnight, was 23 1, among those with perineal cuts or tears, 11.4 among those in whom the perineum was uninjured. In multiparæ it was only 6.8 per cent. The authors recommend that the incision should be made just after the acme of a pain, *i. e.* just as it is beginning to pass off.—*Lond. Med. Times.*

The Treatment of Puerperal Eclampsia.

M. CHAMBERT, in his *Thèse pour le Doctorat en Médecine*, Paris, 1884 (*Medical Chronicle*), gives an account of eight women attacked with puerperal convulsions, one of whom died. The treatment pursued was uniform, and the same as recommended at the conclusion of his thesis. The value of his thesis consists in a concise statement of the treatment, which is at present generally accepted in Paris as the best, although violently opposed by Professor Pajot and other eminent obstetricians.

M. Chambert's conclusions are:

1. A woman presenting the following symptoms, albuminous urine, edema of the lower limbs, headache, troubles of vision, etc., should be placed on an "absolute milk diet."

2. After convulsions have occurred the bowels should be cleared out, and then an injection should immediately be given containing six or eight grammes

(90 to 120 grains) of chloral, according to the intensity of the convulsions. If the temperature rises this should be repeated after two hours, and if the convulsions still persist, the patient should inhale chloroform. The usual formula for the injection is—new milk $\bar{z}$ iij, yolk of one egg, chloral hydrate grs. 90.

In a plethoric patient, with symptoms of congestion, it is permissible to bleed to an amount not exceeding 16 ounces.

3. In every case the termination of labor should be hastened, provided dilatation of the os is complete, the forceps being applied or version employed if there is the least delay in the expulsive stage of labor.

The milk regimen should be continued till albuminuria has completely disappeared, and if, after labor is over, convulsions threaten or actually occur, a draught of 90 to 120 grains of chloral may be expected to arrest the attacks. Milk regimen, chloral and chloroform are the most powerful means of modifying the unknown cause, which produces puerperal eclampsia.

Vomiting of Pregnancy.

Torino (*Anal. del Circulo Med. Argent.*) being led to think that the affection depended on spinal anemia of spasmodic origin or spinal irritation, examined the spinal column, and discovered that there were various painful points in the dorsal region. The symptoms, though obstinate until then, yielded at once to phosphide of zinc and nux vomica; about one-fourteenth of a grain of phosphide of zinc and nearly half a grain of extract of nux vomica being given in a pill three times a day. Whenever in like cases there are painful points in the spine, the author thinks that the preparation of strychnia and phosphide of zinc, or other kindred remedies, will give good results.—*Ibid.*

DISEASES OF WOMEN.

A Modified Operation for Cystocele.

In his remarks before the Cincinnati Obstetrical Society, published in the *Obstet. Gazette*, Dr. THAD. A. REAMY said: Cystocele is rarely found in women who have not borne children. It is rarely disassociated with deformity of the vagina. The walls of the vagina in such cases have been altered in their conditions, in their relations, and in their thickness.

Now, the question is, what can be done for the relief of this condition? and it was to illustrate the operation for this that I brought the subject before you this evening. We know that the first and simplest methods which are employed are those which aim to hold the bladder in place by pessaries, etc. Dr. Skene has devised a pessary which is one of the very best within my knowledge. In almost every case where there is not serious uterine prolapsus, as well as prolapsus of the vagina and bladder, permanent relief may be expected, provided the surgery be well done. But, of course, in cases where there is perineal loss, with vaginal deformity and prolapse, the operation for cystocele proper must, in every instance, be associated with or supplemented by perineorrhaphy and, if necessary, colporrhaphy. The fallacies which are held by so many on this subject, in my judgment, have their origin chiefly in the erroneous conclusion that because it is difficult, and in many cases impossible to cure a uterine prolapsus, it is, therefore, impossible to cure a vaginal prolapsus, forgetting that the former frequently exists for a time without the latter; although it must be recognized by all that sooner or later the uterine displacement will generally follow as an

inevitable result of the dragging of that organ by the prolapsed vagina and bladder. It is true the weight of the vagina is not great, though under such circumstances it is generally increased above normal, for subinvolution of the vagina is almost uniformly present; nevertheless, the weight is quite sufficient to cause the evil. It is not the amount of weight, but the direction and character of the dragging that finally accomplish the bad results. I may as well here as elsewhere declare my belief that, in addition to this dragging upon the uterus, there is the negative influence: absence of such support as the normal vagina gives to the uterus. Unpopular as this view is at the present day, I still believe that this support is not wholly a myth, although in former time it has unquestionably been overestimated.

My own method I have followed in public hospitals and private practice for eight years, with very satisfactory results in favorable cases. I think it has some important advantages.

For the operation, the patient is placed in the extreme lithotomy position, an assistant holding each lower extremity, the posterior vaginal wall held back by Sim's speculum. The tissues are caught up by a small double-toothed tenaculum forceps, and the cutting is done with long scissors, sharp-pointed, curved on the flat—the same as used in perineorrhaphy. A constant stream of water at 100°F. is allowed to play on the field of denudation, the water being carbolized. This controls hemorrhage and keeps the field clear.

I beg to refer you to the imperfect figure which I now draw on the black-board, which explains the direction and extent of denudation, also the methods of suturing and closing.

Fig. 1. Illustrates practically the di-

rection of the denudation, but of course this will vary with the amount of cystocele you are dealing with, and the amount of tissue you desire to remove.

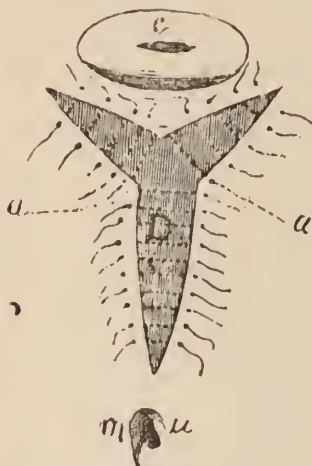


Fig. 1.—D., denuded surface. The lines of denudation are sharply defined, so that when the sutures are tightened they shoulder against each other, and firm union is secured. Ordinarily no cicatricial tissue is found in the line of union. *a*, This suture approximates the three angles. *c*, Cervix. *m.u.*, Meatus urinarius.



Fig. 2. Position of parts after sutures are tightened so as to approximate the edges bounding the field of denudation. Sutures tied.

The denudation is also modified in width or length as each case requires. If you desire to cut deeply, you must remember to avoid wounding the ureters as you denude the lateral branches. There is, however, substantially no danger of this unless you carry the arms some distance out beyond the cervix.

I have never encountered this accident but theoretically the danger does not exist. I will call your attention later to the importance of carrying the denudation deep, and sometimes even into the bladder.

With regard to the position of the ureters, you will see by looking at plate No. 3, by Savage, that the relation is given. The bladder-wall is cut away, showing the relation of the cervix to the entrance of the ureters into the bladder, and it shows you the direction followed by the ureters as they enter.

The inquiry as to results might be stated as Thomas put it. He says it is not material what direction the denudation may take, provided you get rid of sufficient redundant tissue (or words to that effect) and take up the pouch that is present, for it will contract from all directions. But you can readily see that the uterus is one fixed point, the meatus another, and the greatest amount of redundant tissue is situated just forward of the cervix. Now you can see a step further, that if you carry the arms of your denudation on either side of the cervix, the direction of the contraction will be directly in harmony with the original construction of the parts, and that the contraction, if you get union, will be in the very direction in which you desire to get support. Further, in this method the tissues can be safely subjected to greater traction than they can bear in any other method of procedure. In the clinical use of the method you will find that you do not have to denude so large a field in order to get sufficient contraction, or, rather, no one path of denudation is so wide.

Now, a word in regard to the depth of the denudation. As you come down towards the urethra, you can denude very deeply, but it is not necessary to go so deep there, as it is further up

towards the bifurcation of the denudation.

Here, however, if you simply take off the mucous membrane, and do not go through the muscular tissues of the vagina into the cellular tissue between vagina and bladder, the operation will fail, and because you can denude so deeply with safety by this plan is one of its chief advantages. In two cases in which I desired to cut deep, I have opened the bladder and formed a vesicovaginal fistula, but I closed it up at once with the sutures of the operation for cystocele, and nothing untoward occurred. Denude deeply, for the more deeply within limits the more certain you will be to get good results. As already stated, at the upper extremities of the denudation it is better not to go too deeply, on account of the ureters. But that danger, as stated, I do not regard as great.

The sutures are placed in much the same manner as in the other operations, only it is important that they be placed close together. I usually put as many as eight to the linear inch of the denudation. It is important that the suture marked "a" be placed as represented in the drawing. This is for the purpose of drawing the three arms of the Y together, when the stitch is drawn tight. The consequence is that the tissue is pulled forward and backward, and, the uterus being more fixed than the other parts, the tissue is put upon the stretch transversely also. It is immaterial whether the threads show on the denuded surface, or simply split the tissues in the middle of the denuded surface. Even if the suture should go into the bladder it will do no harm. It is important to get the border surfaces united perfectly by first intention.

The kind of suture I am using is the so-called silkworm gut, out of which

fish-lines are made. It is really made of the intestines of a fish, it is an animal ligature, and you can with ease render it perfectly aseptic. It is strong enough for any purpose of this sort. You can draw it with almost your entire strength without breaking it. It is prepared for use by cutting the kinked ends off with scissors, and throwing the rest into a carbolyzed solution—a ten or fifteen per cent. solution in warm water—and in a half hour it is ready for use. Tie two or three knots, or it may come undone, but you may cut the ends short or long as you please. Its advantages are: first, it is very smooth; you can arm the needle with it directly and it will not kink like a silver wire. Second, it has strength enough for any operation of this kind, including trachelorrhaphy. Third, if you render it antiseptic, my observation has been that no more supuration will follow than follows silver wire.

Fourth, although the ligature gets soft enough in the preparation for you to tie it with ease, yet it gets no softer, although permitted to remain in the tissues three or four weeks, thus affording support as to position of tissues equal to that of silver wire. Fifth, although an animal ligature, it is not absorbed, and remains like a wire for weeks. Sixth, you can leave the cut ends in the vagina, for they will not jag the tissues, and even a No. 28 wire will jag it if the ends are cut short.

After the operation the patient must be kept in bed, and a self-retaining catheter kept in the bladder constantly for eight to ten days, until union is complete. This I regard as essential, since the distention of the bladder, which may not prevent union, will nevertheless prevent union occurring with the field of the operation in the contracted state so favorable to good

results. These remarks will impress you as all the more important, if you recall my recommendation always to carry the denudation through the vaginal wall, at least near the centre.

I have operated after the manner proposed in fifty cases, and think my experience warrants the claim that it possesses the following advantages :

1. Simplicity, ease of execution.
2. Less width of denudation is required at any given point in order to secure the necessary contraction after closure than in other methods.
3. The deep denudation necessary to cure in all cases can be done by this method with greater safety.
4. Since tension upon any one line of the operation after union is less than after other methods, and since the deep denudation causes firm union, the good results are likely to be more permanent.
5. After cure, the vaginal orifice and entire anterior wall of the vagina will conform more perfectly to the original.

[All the operations devised for the cure of cystocele have proved failures, as a rule. The reason for this is, that most of these operations, in fact all of them, have consisted in retrenching the anterior vaginal wall. Now, the fact is that the anterior vaginal wall alone cannot be made to support the bladder, if that organ is disposed to prolapsus.

That an operation like the one described above or any one of a similar kind like Sims' operation will relieve the cystocele for a time, but the prolapsus will return if the causes which produced it are not removed.

The pelvic floor gives the most support to the bladder. This is evident from the fact that prolapsus of the bladder is very seldom seen when the pelvic floor is perfect. We are bound to say, however, that this operation as modified by Dr. Reamy is the best that

we have seen, because it is based upon the most scientific principles.]

A. J. C. S.

The Modified Gehring Pessary in Prolapsus Uteri et Vaginæ.

W. W. TURVER, M. D., Parkdale, Ont.—
I herewith introduce to the notice of the profession a pessary suitable to cases of prolapsus uteri of the second and third

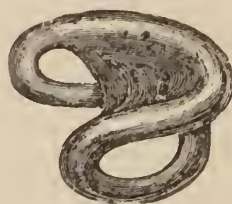


DIAGRAM NO. 1.

Diagram No. 1 shows the instrument with flexible apron springing from the upper branches.

Diagram No. 2 is a side view, showing the cervix uteri resting in the concavity, and may be more minutely described as follows :

Commencing at a point *a*, which is opposite the pubis to *A* is the rounded superior portion, one and one-half inches from side to side, on which the base of the bladder rests ; *A*, along the dotted line to *E*, represents the concave portion behind *a* to *A*, which receives the convex anterior surface of the cervix and fundus.

E represents the flexible dependent portion, or apron, in which the concave portion *A* to *E* terminates, so that the flexibility of *E* makes it a point of motion. That is when the fundus uteri is pushed back by a full bladder in the arc *B* to *b*, the cervix describes a small arc forward at *E*; the varying conditions of the bladder rendering continuous pressure on any portion of the anterior surface of the uterus impossible along *A* to *E* or at *E*.

Superior,

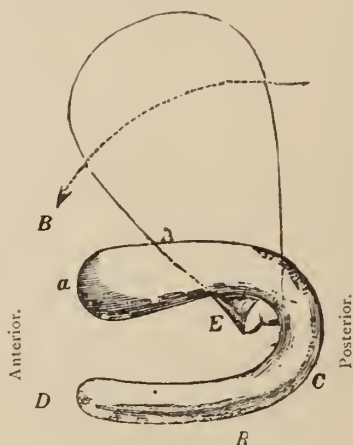


DIAGRAM NO. 2.

C represents the right side-branch of the pessary. The left side-branch is like it. Both branches pass backwards on each side of cervix uteri; downwards along the sacrum

each branch being immediately under each utero-sacral ligament if the rectum is distended, thence forwards, resting on the soft part on either side of the rectum, and terminate in front by uniting in a curve at D, immediately opposite the ostium vaginae. C to R is the portion that straddles the rectum, resting on the soft parts on the most dependent portion of the floor of the pelvis. The curve D is the part of the pessary felt in a digital examination when *in situ*. Passing the finger over D, the full rectum can be felt between the branches at R. Raising the point of the finger to E, the cervix uteri will be felt on a level with the lower border of the flexible apron E, and resting upon it. Pressing the finger laterally, the base of the bladder may be felt folding over each side of *a* to A, and encroaching on the space below the upper convex portion *a* to A.

B, along the dotted line to *b*, represents the curve through which the fundus swings when the bladder is full or empty. The space contained by lines connecting the letters *a* B A would indicate the position of the bladder when collapsed. U S L indicate where the utero-sacral ligaments are joined to the cervix-uteri; by lifting up the uterus, in the way indicated, shows how much the tension will be taken off the utero-sacral ligaments.

Diagram No. 3 shows the cervix resting on the flexible apron between the side branches.

degrees. It is a modification of Dr. Gehring's (St. Louis) double horse-shoe pessary. It is composed of soft rubber, moulded on soft wire, adjustable and easily fitted to each case. It has been tested for over two years and a half in my own practice with satisfactory results. It is especially servicable where there is much weight to be borne, as in uterine hyperplasia; also in cystocele, and in menorrhagia and metrorrhagia, associated with uterine enlargement and congestion.

Dilatation of the Cervix Uteri.

Intra-uterine medication demands in many instances that the cervical canal be first dilated to admit the introduction of the required agent upon an appropriate carrier. The time of intra-uterine injections is past. Besides being in certain cases a hazardous operation, injection of the cavity of the uterus has never yielded satisfactory results as a remedial operation. The effect of the agent introduced is too evanescent, and the uncertainty that it will come in contact with the diseased

part, too great to warrant its perpetuation.

A better knowledge of morbid states of the endometrium also renders it highly desirable that the cervical canal be dilated in frequent cases, not only that we may treat the lining of the body, but that we may arrive at proper diagnosis in other cases.

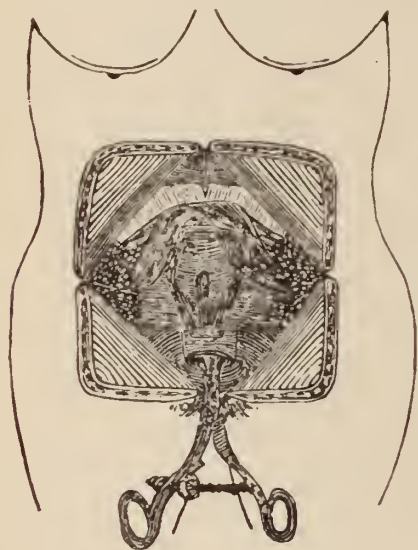
Formerly dilatation of the cervix was affected by the introduction of sponge tents, a slow and unsatisfactory process, requiring from twelve to twenty-four hours for its accomplishment, and a procedure not devoid of danger. With more modern appliances the same result may be obtained in a few minutes with less risk to the patient. The use of hydrochlorate of cocaine facilitates rapid dilatation, reducing the pain of an operation too trivial for the general anæsthetic, and yet quite painful in some cases, to almost nothing.

The growth of fungous vegetation on the endometrium is followed by exhausting and persistent hemorrhage, which is not controllable by internal medication. Such hemorrhage may be tinkered with and held in check by the tampon and various hæmostatics, but there will be an unfailling progress toward a condition of alarming anæmia, unless the morbid growth be removed. To dilate the uterus and remove these growths is in modern time an operation of not difficult or hazardous undertaking.

Many cases of chronic inflammation and ulceration of the endometrium require stimulating applications, that the abraded surfaces may heal. Formerly the routinist introduced a speculum into the vagina, diagnosed ulceration of the uterus and painted the cervix with nitrate of silver, or applied some other form of caustic, as long as the patient would pay for such nonsense. Now we view such cases with more rationalism,

and examine the interior of the uterus where the disease is more apt to be located.

The accompanying wood cut, the amateur work of Dr. H. B. Mehrmann, illustrates a Palmer's uterine dilator in position in a *sectio cadaveris*. The dilator consists of two beaks or levers acting on a central pivot, the beaks



when closed forming an extremity similar to that of a uterine sound. Two inches and a half from the extremity a shoulder is raised on each lever.

In using, the levers are closed by opening the handles and the beak is then introduced until the shoulders are opposite the external os. A slide, connected with the left handle, passes through an opening in the right (this is reversed in the illustration), and upon this, which is threaded, the nut guards a lever on each side. The amount of dilatation having been determined upon, the inner one is adjusted so as to prevent the handles from being brought nearer together, while the outer one may be turned down until the desired amount of dilatation is attained.

A four per cent. solution of hydrochlorate of cocaine should be applied to the external surface of the cervix, and passed as high as possible in the cervical canal with a camel hair pencil, twice at intervals of five minutes, beginning fifteen minutes before the operation.

Manganese in Amenorrhœa.

Dr. A. R. HICKS (*Med. Age*): My attention was arrested some two years ago by an article on the use of binoxide of manganese in amenorrhœa, due to hygienic imprudence at the menstrual nidus, nervous disturbances, etc. A short time thereafter, a Miss N., æt. 17, came under my care. She had taken a severe cold at a dancing party, from the effects of which her menses, which were then on her, became suddenly suppressed. She presented symptoms of decline, with hectic, nervous chills, dry cough and general malaise. After having tried, for a reasonable period, the usual remedies, without result, I concluded to test the virtue of manganese pills. I had an impression that the grave symptoms were due to suppression of the menses, and that, with these re-established, improvement would ensue. I ordered one pill to be taken at bedtime every night. After five pills had been thus taken, the catamenia appeared, and under the use of wine and iron the patient was soon restored to her original good health.

I have since had two similar cases which I treated in a similar manner and with similar results. In one of these the suppression had existed several years. In this latter case fifteen pills taken nightly in the course of two weeks, in combination with tonic diet and medicines, wrought such a change that the patient became a regular patron of the roller skating rink, where she would ex-

ercise for two hours at a time without fatigue. The remedy is certainly one of great power in amenorrhœa.

[We have used the permanganate of potassa in amenorrhœa in a large number of cases, and from the results have come to the conclusion that the drug acts well only in lymphatic subjects, and in that it is like the preparations of iodine.]

A. J. C. S.

A New Emmenagogue.

Dr. J. MATTHEWS DUNCAN, of St. Bartholomew's, London, in a course of lectures on the subject of amenorrhœa, mentions the only emmenagogue medicine with which he is familiar. It is not to be found in the pharmacopœia. It is erotic excitement. Of the value of erotic excitement he has no doubt, but it is only in a modified and carefully considered way that it can be used immediately. There are many points at which medicine and morals come into contact, and their consideration is most important. A long lecture might, with great advantage, be given, describing the mutual relations of the one to the other, and especially with a view to the present subject—the therapeutic power of morals in medicine and the therapeutic power of medicine in morals. The inducement of this erotic excitement, if it is to be induced at all, must be at the wisdom and discretion of the practitioner, who must be the judge of the extent to which it may be advisable to allow the therapeutic properties of this condition to trench on its moral aspects. Few physicians, we take it, will be prepared to take the responsibility of advising it as a therapeutic measure.—*Jour. Amer. Med. Assoc.*

[We must part company with Dr. Duncan when he takes this road. When the physical conditions necessary to

menstruation are present, that function will be performed without erotic excitement as a rule. In the rare cases in which the only factor wanting is normal innervation, the emmenagogue of Duncan might be useful in securing the physical function, but the cure in most cases would be worse for the patient than the disease.]—A. J. C. SKENE.

Cancerous Cachexia.

DR. GOODELL says it is a great mistake to suppose that the cancerous cachexia is present in every instance of cancer of the uterus. He thinks that it is absent in one-half the cases which come to him for treatment. Instead of being lean, bony and scrawny, with a leaden hue of the countenance, many of these cases present a buxom appearance with rosy cheeks. These cases, according to his observation, are less amenable to treatment and are less benefited by operative influence than are those in which cachexia is apparent early.—*Med. Bulletin*. [This has been our experience.]—A. J. C. S.

Hemorrhage Following Operation for Vesico-Vaginal Fistula.

DR. C. H. GHENT reports a case in which, after operation for vesico-vaginal fistula, there was persistent and alarming hemorrhage from the bladder. After trying a variety of measures to arrest the hemorrhage, injections of hot and cold water, of tannin solutions and alum solutions, gallic acid and ergot internally, and the latter by hypodermic injections, all without any apparent control of the hemorrhage, it was decided as a dernier ressort to inject a solution of persulphate of iron. Before doing this, however, Dr. G. decided to inject vinegar diluted with an equal quantity of ice water. The result was most satis-

factory, an immediate and permanent arrest of the hemorrhage. — *Daniel's Texas Med. Jour.*

Fistulous Communications Between the Intestines and the Female Genital Tract.

Since the application of plastic surgery to gynecological operations, the treatment of vesico-vaginal fistulæ is as well understood as are the etiology and symptomatology. The result, though, when contrasted with the old tedious plan of cauterization, is brilliant no less to the operator than to the unfortunate woman whose life is rendered miserable by such conditions.

Dr. H. D. Fry, of Washington, in *The American Journal of the Medical Sciences*, for April, directs attention to less frequent forms of fistulæ that communicate with the genital canal, and records a very obscure and interesting case of intestino-vaginal fistulæ, which terminated favorably without surgical interference. — *Med. & Surg. Reporter.*

DISEASES OF CHILDREN.

A Worsted Truss for Infants.

Mr. LUND, in his second lecture, recently delivered at the Royal College of Surgeons, referred to a form of truss which is free from many of the disadvantages inseparable from the usual form of instrument when applied to a very young patient. He said the truss, or the mechanical appliance which he should specially recommend for the relief of inguinal hernia in the infant, is certainly the worsted truss, a mode of treatment little known he believed, but yet very simple and effective. It is described in *Ranking's Abstract* (vol. ix, p. 131). He had used it in several cases where he had been consulted on the subject of the early appearance of inguinal hernia in young infants. A skein

of worsted, known as "Berlin wool," tied together, is applied around the pelvis and across the front of the abdomen. One end or loop of the worsted is placed directly over the outer abdominal ring through which the protrusion of the hernia is likely to take place; or if the hernia has already become scrotal, it must be first reduced, and pressure made over the spot, if the child should cry or struggle much. The folded worsted is passed horizontally across the abdomen, just above the line of the crest of the pubes, to the opposite side, round the hip, behind the pelvis, and over the hip of the side of the hernia. The folded end is then passed through the loop of the skein, and will here form a knot or bulged portion, which must be carefully adjusted, so as to lie against the hernial opening; and being carried down the upper part of the thigh, between it and the scrotum, if it be a male child, it is brought round the external side of the thigh, near to the top of the great trochanter, and there tied or fixed with a safety pin to the band of worsted already round the pelvis. With a little care this arrangement of the worsted may be used as an excellent defence against the distension of the weak inguinal canal, and the descent of a hernia into the scrotum. It is not powerful enough, nor could it easily be kept in position, when the child is old enough to run about; but on the principle that prevention is better than cure, it is a means of relief to which we can have recourse at a very early date, certainly before we could expose the infant to the torture of an ordinary hernia truss, however weak the spring might be. It has this advantage, that the infant can be washed with the truss still in its place; a fresh one can be then applied and the old one cleansed and used again. — *British Medical Journal.*

Cocaine in "Snuffles."

DR. ZEMSHCHENKO (*London Lancet*), has treated 17 infants from two to three months old, with coryza, by means of cocaine dropped into the nose. Two drops of a two per cent. solution were thus applied from four to six times a day with remarkably good results. In only one case was any increase of secretion observed. He has also made use of a four per cent. solution for older children. As, however, there is some risk of the solution being swallowed and producing vomiting, he finds it best to apply the cocaine by means of an ointment. In one case of suspected "snuffles," in a child three weeks old, whose mother was syphilitic, the writer painted the nares with a two per cent. solution with satisfactory result.—*Northwestern Lancet*.

The Treatment of Nævus by Ethylate of Sodium.

For some months past ethylate of sodium has been extensively employed by me in the treatment of cases of nævus occurring in children, and up to the present I have every reason to be satisfied with its use. I paint over the nævus two coatings of the ethylate on two consecutive days, taking care to protect the surrounding skin before the application, and in all instances of superficial nævi thus treated, have found them cured on the separation of the scab. Those cases affecting the subcutaneous tissues generally require a second, or even in some cases a third, repetition of the remedy.

It seems to leave less scar than nitric acid, to cause less pain to the child, and, undoubtedly, of all applications, is the one least dreaded by the mother.—*Samuel Welch, M.R.C.S., in Brit. Med. Journal*.

Nocturnal Incontinence of Urine.

Dr. A. L. EBERMANN, of St. Petersburg, in discussing the pathology and treatment of nocturnal incontinence of urine in children, insists on the necessity of a strict individualization of the cases. He divides the latter into five categories : 1. Incontinence of urine from failure of sphincter ; 2. Incontinence from increase of contractile strength of the detrusor ; 3. Incontinence from diminution of capacity of the bladder, which diminution results from the patient's adhering to the infantile habit of very often voiding urine ; 4. Incontinence from atony or hyperextension of the bladder ; 5. Incontinence from irritation of the vesical cervix by stones. The first variety of the cases may be recognized on the ground of—*a*, inability of the patient to retain urine also during daytime ; and *b*, easy penetration of a *bougie à boule* into the bladder. The second form may be determined by—*a*, powerful ejection of water injected into the bladder ; and *b*, pain felt by the patient when he tried to retain urine in presence of a call for micturition. The third category is diagnosed also by means of injecting water into the bladder ; when the capacity of the bladder is diminished, the viscus admits only a certain small quantity of fluid, corresponding to the usual quantity of urine voided by the patient at a time ; on injection of a surplus, the fluid flows back more or less rapidly, according to the degree of pressure on the piston of the syringe. Atony of the bladder is easily recognized from the escaping of a large quantity of urine through a catheter introduced immediately after spontaneous micturition. The fifth group of the cases is diagnosed by the sound. As to the treatment, Dr. Ebermann recommends for the first group the administration of *nux vomica* or strychnine, the

ascending *douche* to the perinæum, and above all, electricity in the shape of faradization, or, in obstinate cases, interrupted galvanization, the cathode being placed at the perinæum, the anode at the hypogastrium or sacrum ; for the second group, belladonna in increasing doses (beginning with 6 centigrammes five or six times daily) ; still better, chloral, and in anæmic children solution of perchloride of iron ; for the third group, exercise of the patient's control over the bladder, intravesical injection of warm water in gradually increasing quantities ; for the fourth, frequent catheterization, vesical injection of water, and electrization ; for the fifth, lithotomy or lithotrity.—*London Medical Record*.—*Md. Med. Jour.*

The Prevention of Ophthalmia in New Born Children.

At the annual meeting of the Obstetrical Society of London, held February 4th, 1885, DR. M'KEOWN read a paper on "The Prevention of Ophthalmia Neonatorum and its Ravages" (*Lancet*, February 21st, 1885). The author pointed out that the text books and lectures on midwifery should deal fully with the etiology, progress, and treatment of ophthalmia neonatorum, and that midwives should be taught and required to understand their duties with regard to the disease. Infective matter in the genital passages of the mother is a frequent cause, it has been stated to be the only cause ; and hence attempts have been made to prevent the disease by treatment applied to the vagina before delivery, and to the child's eyes immediately after birth. It was also claimed that by vaginal injections the frequency of the affection had been diminished, and by some, that by treatment of the eyes, the disease had been prevented. Abolition of the disease was

stated to have been obtained by Créde in 499 cases by washing the eyes with pure water, and then applying a two per cent. solution of nitrate of silver. At the Stuttgardt Maternity, by Créde's plan a large reduction in the frequency had been effected ; (a) by the nitrate of silver treatment in the wards of Professors Carl and Gustav Brown, where, of more than 3,000 births, only 1.93 per cent. were affected, whilst of 1887 born at the same time, but not similarly treated, 4.34 per cent. were affected ; (b) by Prof. Olshausen, who, by washing the eyes with a one per cent. carbolic solution, reduced the percentage from 12.5 to 6 per cent. ; (c) in the practice of Prof. Simpson, by the nitrate of silver treatment ; (d) of 2266 births in the practice of Dr. Abegg, who washed the eyes immediately after birth with pure water, only 3 per cent. were affected ; (e) reduction in the frequency had also been obtained by Bischoff, who, by vaginal carbolic injections and washing of the eyes with salicylic lotion, reduced the percentage from 5.6 to 2.6 per cent., and also by Créde, by vaginal injections (carbolic and salicylic acid). These results warranted an extensive series of investigations in order to determine to what extent the occurrence of ophthalmia neonatorum might be prevented, and what methods of treatment yield the best results. These points could be settled only by those in obstetric practice. Inquiries were needed regarding, first, the influence of cleansing and disinfecting of the general passage of the mother previous to delivery. Was this a plan of treatment which might be adopted as a routine practice in every case of labor ? Secondly, the influence of simple cleansing, and astringent treatment of the eyes immediately after birth. The entire treatment of the eyes should be in the hands

of members of the profession, and investigations should be made in the various lying-in hospitals of the country by the resident medical officers of those institutions.—*Therapeutic Gazette*.

The Cure of Hernia in the Infant.

DE GARMO (*Med. Recora*).—In reference to hernia, as we find it in the adult, it is impossible to speak with any degree of certainty respecting a cure; but in hernia in the infant, careful, early, and persistent treatment will be rewarded in almost every case by a cure. Special mention is made of two or three causes of infantile hernia, which, if not recognized and removed, will prevent success in treatment. Phymosis is not only a more frequent cause than is generally supposed, but its presence is an almost insurmountable obstacle to the cure of the case on account of the straining that accompanies urination. This difficulty should be removed before beginning the treatment for hernia. Not infrequently constipation is the cause of hernia in infancy, and inquiry should always be made on this point. Another cause is the frequent habit of tight bandaging which forces the viscera into the lower part of the abdominal cavity, producing undue pressure in this region. The assertion by some writers that congenital hernia is by its very nature incurable, is wholly incorrect. If complete and constant retention of the hernia be accomplished by the judicious application of pressure over the canal, a cure can be obtained about as quickly as in any other form of hernia. A complication of congenital hernia is the presence of fluid within the abdominal cavity which descends into the scrotum with the hernial contents. In these cases a properly fitted truss, with a small convex pad, will retain the intestine, and the fluid will, ordinarily, disappear within

the first month or two. Hydrocele is a frequent complication of hernia in infancy, and tapping is usually sufficient for a cure. With reference to the proper age to begin treatment, the writer has frequently begun on infants two weeks old; one month should certainly be the limit as to the length of time that should be allowed to elapse before treatment is commenced. Intestinal irritation appears very commonly in infants afflicted with hernia, and as commonly disappears when the hernia is properly retained. The hard-rubber truss is the only one perfectly adapted for use on infants; springs protected by this substance retain their elasticity, do not corrode by frequent wettings, and the entire truss can be washed daily. The best style of spring for single hernia is that which crosses the front of the abdomen and passes around the hip opposite to the affected side. A small, oval pad, located as nearly as possible over the internal ring, is the best for use.

The Relative Weights of New Born Children.

Wolff, in his inaugural dissertation, Munich, 1883, has given the results of his industrious examination of the statistics of the Lying-in Hospital, in Basle, with reference to the relative weights of new born infants. His inquiry covers the period from 1873 to 1882, inclusive, and embraces the statistics of 2,032 children. The analysis of his numerous tables leads him to the following conclusions:—

1. Full term children, the offspring of multiparæ, and boys, weigh more at birth than the prematurely born, the offspring of primiparæ, and girls. The difference between the weights of infants of primiparæ and multiparæ is less when the children are prematurely born.

2. The majority of infants lose weight in the first hours of life; in nine per cent., however, there is a gain in weight.

3. The loss of weight in children of both sexes ends in the first three days. Infants of multiparæ and full term children complete their loss more quickly, in the average, than the new born of primiparæ and premature infants.

4. The normal amount of loss in weight reaches from 3.5 to 11.5 ounces; sex and development of the children are without influence.

5. In the same given period of time, a greater number of boys re-attain their initial weight than girls, and boys of multiparæ in greater numbers than those of primiparæ.

6. At the end of seven days half of all new born infants have re-attained their initial weight, and it is to be considered an exception for an infant to be below its initial weight after the fifteenth day.

7. More boys and children of multiparæ re-attain their initial weight in the first week than do girls and children of primiparæ.

8. During the usual stay in hospital more boys than girls show an increase over their initial weight, especially so the children of multiparæ and those fully developed.

9. The usual daily increase in weight amounts to 0.35 ounce. Full term children, boys, and infants of multiparæ make relatively larger daily gains.—*Boston Medical and Surgical Journal.*

OBSTETRICS.

The Influence on Labor of the Interval Between First and Second Labors.

LUDWIG KLEINWAECHTER (*Zeitsch. f. Geb. u. Gynäk.*, T. XI, cap. I), gives the following:

1. Women who become pregnant for

the second time, after a long interval of time (6 to 16 years), become subject to sickness, whether accidental or dependent upon pregnancy, much more readily than those who conceive more rapidly (1 to 6 years); this is particularly the case when the interval of time is 10 years and longer.

2. Persistent vomiting manifests itself more frequently after a long interval than after a short one.

3. There is less liability to ante-partum hemorrhage.

4. There is a relative or absolute increase in the liquor amnii.

5. The duration of labor is greater, and relates particularly to the first period, the other two being but little modified. If the interval be more than 10 years, the duration of the third period is increased, and labor appears to be as long, or even longer, than with primiparæ.

6. The duration of labor with biparæ is about 10½ hours.

7. In cases of long interval feebleness of contraction is more marked. Lacerations of the perinæum are more frequent, as also post-partum hemorrhages, adhesions of the placenta, diseases of the kidneys, and increase in frequency of œdema of the extremities without albuminuria.

8. Inflammations of the breast diminish with the lengths of interval, as well as the amount of milk.

9. Morbidity and puerperal mortality increase.

10. Puerperal mania does not seem to be increased.

11. The longer the interval, especially after 10 years, the less prospect is there for the pregnancy to reach full term. The length of the interval has no sensible influence on the frequency of normal or abnormal presentations of the fœtus. It favors the birth of girls rather than boys. The child is larger and

longer. The shorter the interval the greater the disposition to prolapsed funis. Twin pregnancies increase with the interval, as also foetal malformations.

12. The longer the interval the greater the foetal mortality. This is applicable to still-births, to children dying immediately after delivery, and to those who die in the eight days after delivery.—*Archives de Tocologie.—Jr. Amer. Med. Assoc.*

Face and Brow Presentations.

DRS. BEUMER and PEIPER contribute to the *Archiv für Gynäkologie* (Band xxiii, Heft 1), an account of the midwifery clinic at Griefswald, under Professor Pennice, during the last 25 years. The most interesting part of the installment given is that which relates to the cases of face and brow presentation observed. (1.) *Face presentations.*—The births in this clinic in 25 years numbered 6,336, and among these occurred 54 cases of face presentations, a proportion rather above the average. The authors consider, in the light of these cases, some of the causes commonly assigned for these presentations. First, they consider Braun's theory, that they are due to reflex movements of the foetus, producing extension of the chin, which is then grasped by the wall of the uterus, and so fixed in the pelvic inlet, a theory in accordance with which Braun asserts that face presentations cannot occur with placenta prævia, nor with a dead foetus. These assertions are negatived in the paper before us, by the record of cases in one of which face presentation occurred with placenta prævia, and in the other with a decomposing foetus. The authors next consider the dependence of face presentation upon pelvic contraction, a condition said

by Winckel to be present in rather more than a fifth of all face presentations. Our authors, out of 54 face cases, find contracted pelvis present only in four. They therefore agree with Hecker in thinking pelvic contraction only an infrequent cause of this presentation. Hecker's theory, that it is often due to a dolicho-cephalic head, is the next subject for discussion. It is, as every one knows, common for children born after face presentations to have heads longer than common, but this is mainly due to compression during labor. Drs. Beumer and Peiper nevertheless think that in some cases face presentation may be due to peculiarities in the shape of the head, either greater length, or unusual width in the biparietal measurement. They refer to cases published by Fritsch in which not only was the biparietal measurement unusually large at the time of birth, but in the first few days of life still further increased, this latter fact proving that the increase was not produced by pressure during labor. Out of the 54 cases in the Griefswald clinic, in 6 the head was unusually large, and in two there was hydrocephalus. Our authors give three cases in which face presentation was primary, that is present before the beginning of labor. In one it was present five days, in another 10 days, and in another 8 days, before the commencement of the pains. The infantile mortality was 6 out of 54. In five cases forceps were used, 7 times delivery was effected by turning, twice by perforation, and in one case the "accouchment forcé" was resorted to, with a fatal result to the mother. The special therapeutical measure which the authors favor in the most difficult cases, viz.: those with the chin posterior, is the rotation of the chin forward with the forceps. This was attempted in two of the cases, in one with success, in the other

without, perforation being then necessary.

(2) *Brow presentations*.—Of these no less than 9 occurred out of the 6,336 cases. Six of the children were still-born, and three of the mothers died, another of them being left with a vesical fistula, facts which sufficiently show the difficulty of labor with the head presenting in this position. In three cases, labor was terminated by the natural efforts, in two of them the head passing through the pelvis in the brow position, in the other the brow presentation being spontaneously converted into a vertex. Three were delivered by forceps, two by turning, and one by perforation. The authors remark upon the paucity of information given in most text books, upon these extremely difficult cases. They recommend that, if brow presentation is early recognized, turning should be performed. If not seen until too late for turning, *i. e.*, when the liquor amnii has escaped and the uterus has contracted round the child, then they think forceps should be applied, by traction with which the malposition will sometimes be corrected. Attempts at converting the brow presentation into a face or vertex, by pressure with the finger, as is advised in many books, they think almost invariably fails. If by the forceps delivery is not quickly effected, then they advise perforation without further delay.—*Medical Times*.

A Method of Detecting Lacerations of the Cervix-Uteri Post Partum.

DR. JOHN BARTLETT, in a paper read before the Chicago Medical Society, Aug. 3, 1885, says: My object in addressing the Society this evening is to suggest a way and a time in which laceration of the cervix-uteri may be easily and certainly detected soon after its occurrence. Directly after delivery, if the

fingers be introduced deeply into the vagina up to the contracted os uteri internum, and then carried in any direction a little outwardly, the flabby and floating ring formed by the non-contractile cervix may be felt, as Guillemeau described it, three hundred years ago, "like a section of large intestine." By carefully following the entire circumference of this ring, an existing rent may be discovered. But this examination is attended with some difficulties. The patient is exhausted with her labor and fatigued with our attentions, and just now, since "it is all over," longing for rest. She is impatient of, and perturbed by, this post-factum inquiry. Her state of mind, and possible expression of complaint, are apt to render an examination, which the physician cannot regard as absolutely necessary, less exact and thorough than it would be otherwise. And then, the soft and floating margins of the cervix uteri have often somewhat of an intangible feel, if I may so express myself, gliding past the fingers like a detached clot-of blood, and occasionally, in some portion of the circumference, passing out of satisfactory reach.

On these accounts it is not surprising to hear an obstetrician say that he cannot tell whether the post partum cervix is lacerated or not. Now, I desire to teach those who may not be familiar with the short lesson that I propose to impart this evening, how to discover a cervical laceration after labor. The error of accoucheurs who fail to recognize such a condition is that they do not make their observation of the suspected cervix at the proper time. They examine the neck actually as we have just done mentally—after the clearance of the uterus. The favorable moment for the examination—and this is the gist of my remarks—is just as the placenta is beginning to occupy and distend the cer-

vix. The collar of flesh is then not floating and uncertain, but on the stretch, expanded, forming a distinct ring easily followed in its entire circumference. At this moment, then, just as the cervical tube is being rendered tense by the placental mass, any laceration in it may be detected with ease and certainty.

—*Md. Med. Jour.*

Should Arsenic be Administered to Nursing Women.

At a recent meeting of the Société de Médecine Légale, in Paris, M. BROUARDEL reported a very interesting case bearing upon this question. He was called upon to say whether an infant of twelve months could be poisoned by the milk of its mother when she had taken a considerable quantity of arsenic.

In the case in question, a man who had some trouble with his wife and mother-in-law was suspected of having given arsenic to them. Both were made ill, and the child died with symptoms of cholera a few days afterward. As the weather was quite warm, however, it was not suspected that the death of the child was due to any other cause than a severe case of summer diarrhœa. But when the wife and mother-in-law were again attacked, with the same severe symptoms, in November, the husband was suspected; and the wife claimed to have found a package containing a white powder in her husband's pocket.

The case being then submitted to Brouardel, he exhumed the body of the child, which had been buried six months previously. It was completely transformed into adipocere, so that it was impossible to separate the viscera from the other parts. It was therefore subjected to analysis *en bloc*. It weighed about 2.50 killogrammes, and contained 5 milligrammes of arsenic. It was impossible that this arsenic could have

been derived from the cloths enveloping the cadaver, or from the soil in the vicinity of the grave.

The next question was to determine whether arsenic is eliminated by the milk, and in what proportions. M. Gabriel Bouchet, for this purpose, administered Fowler's solution, in doses of gtt. ij—xij, to a number of wet nurses, and found that the milk afterward contained a proportionately large quantity of arsenic. When, for example, the woman had taken 8 milligrammes of arsenic for six days, 100 grammes of milk contained 1 milligramme of arsenic. With these doses of Fowler's solution neither the nurses nor the children felt any bad effects from the experiments. In order to determine whether the effects would have been the same, had the arsenic been administered in one large dose, experiments were made on animals. The results were not very conclusive, however, as the susceptibility of animals to arsenic is very variable. But it was conclusively shown that arsenic is constantly eliminated by the lacteal glands; whence it seems that it should not be administered to nursing women—or only with the greatest care.—*Western Lancet*.

Inhalations of Oxygen for Puerperal Convulsions.

It is known, says HOLSTEIN (*Gaz. Med. de Paris*.—*New York Med. Jour.*), that oxygen has the property of enfeebling, or to use a fashionable term, "inhibiting," exaggerated reflexes. On the strength of this fact, Prof. Lackiévitich, of Kharkow, lately proposed inhalations of oxygen in cases of puerperal eclampsia of reflex origin. In two consecutive cases Favre ("Wrath"), acting on the suggestion, has produced truly brilliant results. He is convinced that a bag of oxygen will soon be considered as indis-

pensable in lying-in hospitals and obstetrical clinics, as the forceps, the cranioclast, and other like instruments.

Diaphoretic Treatment of Puerperal Eclampsia by Hot Baths.

DR. BREUS reports (*Archiv. fur Gynaekolog.*, xxi., i.) eleven cases of puerperal eclampsia treated by the hot bath with ten recoveries. He had previously treated six cases by this method, losing in this series, likewise, one case. He first places the patient in a bath of 100° F., and gradually increases the temperature from two to four degrees. He then envelops the patient in blankets to excite an abundant diaphoresis. Of these eleven women, four had had convulsions at the commencement of labor, two during gestation, one at the moment of delivery, and four after delivery. The author affirms from his experience with these seventeen cases, that neither abortions nor hemorrhages are to be feared from the employment of the bath, and that when the presence of albumen in the urine indicates a threatened complication, the bath constitutes an excellent prophylactic means. One of these cases reported was that of a primipara, aged twenty-six, who was attacked with œdema and albuminuria. In the eighth month baths began to be given. After taking forty-five, she was successfully delivered of a large and healthy child.—*Medical Record*.

Treatment of Placenta Prævia.

DR. E. G. EDWARDS has adopted a plan of his own, which he thus describes in the *Canadian Practitioner* for September:

"When called to a case of placenta prævia near the end of pregnancy, when flooding is in progress, with the pains

continuing, and the patient not too weak or exhausted, he separates as much of the placenta as he can on one side, detaching a portion of it completely from one side, bringing into the vagina; and if the os is not well dilated, and the pain continuing, to squeeze the detached portion between his fingers, or to press it firmly against the opposite side until the os dilates; then he gives ergot, and ruptures the membranes, still pressing the detached portion of the placenta until the head descends sufficiently to check the hemorrhage."

A New Oxytocic.

DR. W. B. ARBERY reports in the *Medical Record*, that he has the most remarkable success in stimulating feeble uterine contractions, by the use of hot mush poultices, applied as hot as could be borne over the fundus of the womb, replacing them as soon as one becomes a little cold; he reports four cases in which this method of treatment served to accelerate the termination of labor.

Chlorosis.

In *chlorosis*, the following has often been of avail: R. Ferri sulphat. exsic., ℥ij.; quininæ sulph., ℥j.; strychninæ sulph., gr. ss. M. Ft. pil. No. xx. Sig.—One pill, three times a day.—*Coll. and Clin. Record*.

Menorrhagia.

A young girl, aged 15 years, was shown to the class by Prof. Parvin, complaining of severe *backache and constipation*. She menstruated once every two weeks—was given quinine, gr. v. daily, and arom. sulphuric acid, gtt. x. twice daily; bran $\frac{3}{4}$ ss. in water, at night, for bowels.—*Ibid*.

BOOK NOTICES.

THE TECHNOLOGY OF BACTERIA INVESTIGATION, etc. By Charles M. Dolly, M. D. Published by S. E. Cassius & Co., Boston, Mass., 1885.

We have before us a book that is a credit to the author and the publishers, abounding in "Explicit directions for the study of bacteria, their culture, staining, mounting, etc., according to the methods employed by the most eminent investigators." The preface is a model of brevity and consists of only one sentence. The book contains a most copious table of contents, covering eight pages, closely printed. There is no index, and probably because the table of contents is, in every respect, a satisfactory substitute. The work is divided into three parts. Part I. "General Directions." Part II. "Special Methods for Investigating Pathogenic Bacteria." Part III. "Formulary."

Part I. is in four subdivisions. The 1st is on "Microscopical Preparations," and for "Living Forms," and gives the various methods of Schnetzler, Brantlecht, Miquel, Hesse, Marchand, Naegeli, Buchner and Robert, Tiegel, Bardon-Sanderson, Chiene and Ewart, Nencki and Giacomini, and Moss. Nencki should be Nencki, at the beginning of the second paragraph, p. 25. Under "The Study of Microscopical Preparations of Fixed and Hardened Bacteria," he gives methods by Hazelwood, Blanchard, "T. C.," Koch, Gram, Weigert, Schutz, Babe and Subbotin. Then follow Sternberg's, Kaschka's and Dufrenoy's methods for the "Preparation of Bacteria for Photography." The 2d is on "Culture Experiments," and here are given the methods of Pasteur, Buchner, Tyndall, Miquel, Gautier, Koch and Gaffky, and Loeffler, Salmon, Sternberg, Van Tieghem and Lemmonier, and Salmonson. Salmon's culture tubes are thoroughly described. The 3d comprises a few pages on "Vaccination or Culture Experiments," and here the author expresses himself to the effect that Pasteur's inoculations were with attenuations so weak that they gave the vaccinated animals no immunity. He adds, that attenuated virus sufficiently strong to insure the safety of the animal, is very apt to be followed by fatal consequences. The 4th is a "Biological Analysis," composed mainly of a consideration of the methods of Engelmann, Duclaux, and Pictet and Jung. Each division has subjoined a bibliographical list, and the total number of references in this first part is 164.

Part II. treats of *Anthrax* (with the methods of Toussaint, Pasteur, Chavean, Chamberland and Roux, Koch, Gaffky and Loeffler, Weigert, and Fet'z); *Cholera*, (methods of Koch, Nicati and Rietsch, and Bochefontaine); *Glanders*, (Loeffler and Shntz's method); *Hog Cholera*; *Hydrophobia*, (methods of Gibier, Pasteur, Babe); *Leprosy* (Babe, Baumgarten, Neisser); *Malaria* (Klebs and Tommasi-Crudelli, Richard); *Malignant*

Oedema (Pasteur); *Syphilis* (Birsch-Hirschfeld, Klebs); *Tuberculosis* (Koch, Ehrlich, Ziehl, Balmer and Fraenkel, Rindfleisch, Orth, Lichtheim, Petri, Gibbs, Banmgarten, Weigert, Fraenkel, Pfuhl-Petri, Senkevitch, Kaatzer, Long, Peter, Veraguth, Coze and Simon, Déjérine, Giboux, Ermenyev, Brun, Barrill, Hartzell, Quinlan, Negri, Reinstadler, Celli, Guarnieri); *Typhoid Fever* (Letzerich, Rindfleisch); *Whooping Cough* (Burger); *Dental Caries* (Leber, Miller); and also chicken cholera, diphtheria, erysipelas, furuncle, gonorrhoea, osteomyelitis, crupous pneumonia, recurrent fever, and yellow fever. Nearly thirty additional "Miscellaneous Pathogenic Bacteria," are named, and the special literature pertaining to them annexed. "Bacteria in Plant Tissues," is the succeeding heading, and here are given the methods of Duclaux and Ralph. The bibliographical references in the second part, number 443. Alcaloid should be alkaloid, pg. 95, line 4 from below. The author seems to favor the idea that "the protective inoculation methods practised up to the present time, are of doubtful advantage." He credits A. Van Leenwenhoek with having been the first man who ever saw a bacteria, and this was in the year 1683. They were found "in the white substance adhering to his teeth." Friere's *ethod* should read *Friere's Method*, pg. 222, beginning of chapter on yellow fever.

Part III. consists of fifty formulary for mounting, staining, imbedding, cultures, etc. They are numbered and lettered, and freely referred to throughout the text in parentheses.

This work is compact, terse and remarkably full. The author is not an ardent supporter of Pasteur, but rather favors Koch, and yet it would be wrong to designate the book as partial. The bacillus of tuberculosis is the one most elaborately considered. The work is evidently not designed for beginners. It would hardly do for a student's work at college, but for the advanced student and original investigator, it is a valuable, in fact indispensable, companion. In size, the book is octavo and contains 263 pages. No American laboratory is complete without it.

THE DISSECTOR'S MANUAL. By W. B. Clarke, F. R. C. S., and C. B. Lockwood, F. R. C. S. Published by Henry C. Lea's Son & Co., Phil., Pa., 1885.

This is a 12mo. book of 390 pages. It contains 47 illustrations, of which 45 are original. A double frontispiece, showing the relations of the trunk viscera to the bony framework and the skin in diagram, is useful and instructive. There are 16 chapters, besides the preface, table of contents and index. The latter is copious, covering 14 pages. Chap. I., on "How to learn Anatomy," is one of the very best we have ever seen, and is worth

more than the price of the book. To do it full justice, it would be necessary to requote it almost verbatim. Our advice to all students is to get it and read it. A glossary of a few pages concludes the chapter, and might be lengthened with advantage. The diagrams, though not elegant, are *excellent*. Fig. 34 is the best cut we have ever seen of the tensor tarsi muscle and the parts with which it is more intimately related, both anatomically and physiologically. Fig. 47, showing the membranes of the spinal cord, is also very instructive. In hurriedly looking over the book, we find the authors guilty of an inconsistency—On pg. 22, line 6 from below, "... beneath the pectoralis minor," should read "... behind the," etc., for they say, on pg. 7, "... and the body will always be supposed to be *standing up* and *facing* the person who is describing it." We are also glad to note that they do not describe the superior thoracic as being given off from the axillary. Chapt. 16 is on "Dissecting Questions" and is a good counterpart to the opening chapter. While we cannot too strongly advocate the study of the skeleton by the process of filling it in with the soft structures by the imagination, we fail to see any good in cutting out pieces of paper to represent muscles, nerves, blood vessels, etc., and covering them over the skeleton. This is worse than useless. We would also call the attention of the authors to the foot note on pg. 374, which is not referred to in the text above it. In conclusion, we consider this by far the best dissectors' manual we have ever seen, and give it our unequivocal preference over all others.

ELEMENTS OF SURGICAL PATHOLOGY. By Augustus J. Pepper, M.S., M. B. Lond, F.R.C.S., Eng., etc., etc. Published by Henry C. Lea's Son & Co.

This is a 12mo. work of 503 pages. It consists of 94 chapters and covers the entire ground. Chapt. II. is on "*Pain*," and we regret that it is not many times larger than it is. From it decided advantages may be derived by the reader, and especially the student, for whom the book is designed. Chapt. V., on "*Fever*," is also interesting and instructive. It is refreshingly simple. Chapt. XVIII. is on "*Syphilis*," and it tersely but thoroughly covers the ground and does more to simplify the complexity of the subject than most works we have seen. A compact and valuable chapter is No. XXIX. on "*Pulsation of the Eye-Ball*." Chapt. LXXII. on "*Surgical Kidney*," gives a very clear and concise description of this condition. The last fourteen chapters are devoted to the various kinds of Tumors. This work, despite its unpretentious appearance, contains a mine of information, and as we have formerly stated, treats of every thing within its scope. It amply fulfills its prefaceal claims.

DISINFECTANTS AND THEIR USE. Published by Wm. O. Allison, N. Y.

The work before us consists of twenty-one essays submitted in competition for prizes offered by the "Druggists' Circular," and numbers 168 pages. That it is a valuable work in one sense, no one will deny, inasmuch as it contains at least two essays, namely Nos. 11 and 20, that are up to the times, one of which, No. 20, contains much that is original. Judging from the way matters stand at present, however, the work promises to be potent for much evil. There were three money prizes offered for the best three essays. Three competent (?) men were selected to discover these and award the money. The committee consisted of S. A. Lattimore, Chemist to the N. Y. S. Board of Health; Dr. Henry B. Baker, Secretary of the Mich. S. Board of Health; and Joseph P. Remington, Prof. of Pharmacy, Phila. Col. of Pharm. We purposely refrained from reviewing this work until these gentlemen had decided upon the essays to be honored, as we did not think it fair to influence their decision. We are extremely surprised at their judgment. Especially do we marvel at Dr. Henry B. Baker, of Michigan, having lent his name to such iniquity. In our opinion, he was the only competent man on the committee. He is a physician, and interested in disinfectants and antiseptics. The other two are not physicians. One is a pharmacist and the other a chemist. Is it possible that Dr. Baker's selection of either 11 or 20, for the first prize, could have been overruled? We fear it may be so. No. 6 gained the first prize, No. 11 the second, and No. 20 the third. No impartial and competent judge will deny for a moment that 20 should have received the first prize, 11 the second (as it did), and that 6 should never have received any prize. We must bear in mind that the populace go to the druggist for disinfectants, and take what is offered them and employ it as the pharmacist directs. The retailers, in turn, depend upon a select few for their knowledge as to what these agents are. Their authority, henceforth, to a very great extent, would be the work before us. One of the worst essays (No. 6) submitted in competition, received the stamp of competent authority (?) as being the best paper of the twenty-one. Druggists, therefore, will offer to customers what this essay recommends, and the unfortunates trusting in such misguided judgment, will hasten on all the more to increased sickness, suffering and death. No. 6 is replete with errors and inconsistencies. Authorities long ago out of use are quoted with all their long ago disproven ideas. Of some of the later and better authorities, he misapplies the meaning. The last half of his essay is composed of references, some of which are repetitions. A part of it is also composed of disinfectant formulæ, not one of which we should at all care to use. He recommends, among other things, hanging up in a sick room towels wet with a saturated

BOOK NOTICES.

solution of the chloride of lead. Now we leave it even to chemists and pharmacists who are not physicians, if this is not perfect nonsense. A chance of poisoning your patient without damaging his microscopic fever! The author of No. 6 also seems to rank *copperas* and *lime* above corrosive sublimate and chlorine, and it also seems that Dr. Henry B. Baker lent his name to this brilliant view. We cannot believe it, and until he admits it, we will not believe it. The author of No. 6, as appears from the prize announcement, is a layman and former attaché of the paper giving the prizes. We believe he is an ex-editor of the "Druggists' Circular." The authors of Nos. 11 and 20 are reputable physicians, and the latter one of rising prominence and reputation as a thinker and investigator. The conditions to be observed by competitors were: "That the articles be scientifically correct, as free as possible from unnecessary technical terms, and give clear directions for the preparation and use of the disinfectants recommended." All of these three conditions were flagrantly violated by No. 6, but religiously observed by Nos. 11 and 20. Such is the reward of merit. Where is Dr. Henry B. Baker, of Michigan?

LECTURES ON THE PRINCIPLES AND PRACTICE OF MEDICINE. By Nathan Smith Davis, A.M., M.D., LL.D. Jansen, McClurg & Co., Chicago, 1884.

We have been greatly interested in reading Dr. Davis' work on Practice, both on account of the marked individuality stamped upon the book, and because of the fact that it is the first systematic treatise on internal medicines that has come from the far West.

The many important positions held by the author, as teacher, editor, and one foremost in the councils of the American Medical Association since its birth, have given him rare opportunities for the acquisition of knowledge in this department. That the opportunities have not been neglected will be evident to any one who carefully peruses his work.

The familiar style of lectures is adopted, probably for the purpose of making the book attractive to students. It also allows of an easy and somewhat discursive treatment of subjects which, in a more formal treatise, would require more accuracy and conciseness of statement. But this easy style offers constant temptation to inexactness and even carelessness, to which temptation our author has, we fear, occasionally yielded. The carelessness, however, is more apparent in the form than in the substance, and the phraseology and punctuation will undoubtedly be more thoroughly corrected in the future editions which we hope will be required. The work of the publishers is well done, and the volume is put forth in a shape worthy of the house from which it emanates.

In the opening chapters, Dr. Davis dwells,

at some length, upon the general principles of pathology, diagnosis and treatment, and proposes an original nosological table, whose simplicity at least, should recommend it. The great and insurmountable obstacle to classification is the undeveloped state of our pathology. It will be many years before anything more than a very incomplete division of diseased conditions into natural orders, classes, genera and species will be practicable. The most interesting and ingenious attempt in this field which we have seen of late years was made by Prof. E. C. Spitzkar, in his work upon insanity. The difficulties which he encountered in his special department, and it is a very elastic one, where a new variety or so can be created by any author, to suit the necessities of his case, are far less than those to be overcome by one who essays in the vast field of internal medicine. That Dr. Davis has succeeded so well is to his credit.

The generalizations of our author, are expressed in the names of certain *properties* and *functions* which are shared, alike, by all organized bodies. The general properties are *susceptibility* and *vital affinity*; by virtue of the first the cell or germ has the "capacity to receive impressions; the other property causes the atomic changes which result from the impressions received to follow certain laws, both in the addition of new atoms and the liberation of old ones." "These," says the doctor, "constitute the peculiar and elementary forces of the organic world, and can be recognized and studied only by their effects, in the same manner that we recognize and study the imponderable or elementary forces of the inorganic world, as heat, electricity, attraction, etc." It would appear at first sight, that the author had adopted but a modification of the theory of the so called vitalists, but we presume that were more space given to the elucidation of his views, we should find that they would more closely correspond to those expressed by Prof. Virchow in an article entitled "Krankheitswesen und Krankheitsassachen," which appeared in his Archiv, a few years ago. He would, probably, admit that the terms *susceptibility* and *vital affinity* are simply convenient formulæ for designating various combinations of physical and chemical actions as they occur in the organic world.

The primary organic functions result from the operation of the elementary laws (or properties) upon the five primary structures, nerve, muscle, secretory structure, capillary vascular structure and fibrous structure, and are in the same order, *sensibility*, (resp. *transmissibility*), *contractibility*, *secretion*, *movement of fluids*, *elasticity*. Our space does not permit of a more extended notice of this very interesting subject, suffice it to say that whether we accept the conclusions or not, it is evident that they are the result of much thought, aided by extensive erudition.

We can do no more than call attention to some of the salient features of Dr. Davis' work.

The lectures on the essential fevers are of

especial interest, particularly those on the malarial and typhoid fevers. Some few inaccuracies occur, such as speaking of the northern coast of South America as forming part of the boundary of the Gulf of Mexico, and alluding to the prevalence of fever along "the south and southwestern coast of China." These, however, do not detract from the value of the work, but are simply blemishes which will, of course, be removed from future editions. The description of the clinical history of malarial fever in its various forms is carefully given and the principles of treatment are clear and sufficient. The statement, or rather the implication, that the malignant malarial fevers of the gold coast, of the Pontine marshes and of the Indian jungles are identical in origin with our intermittents and remittents, may have to be reconsidered hereafter. It is already suspected, among the bacteriologists, that the infecting organisms of the Roman fever are not the same as those of our own malaria. The difference in clinical history and mortality would point to the same conclusion.

Typhoid or enteric fever is treated with great care and the therapeutics of the disease are well stated. We know of no better rules for the general management of this fever than those given by Dr. Davis. His protest against over feeding and over stimulating is most judicious, and his dietetic rules might well be committed to memory by every young practitioner. We are too often told to "nourish the patient," to "see that the vital forces are sustained," or simply to "keep up his strength," without having any definite directions as to how these very desirable objects are to be accomplished. And the example set by the teacher in the lecture room, is followed by the student at the bedside.

The consequence is that the feeding of the patient, which, in this particular disease, is of far more importance than the medication, is left to the nurse, whose supreme effort results in the concoction of some of the so called beef tea, to which Dr. Davis refers in such uncomplimentary terms. The reader will be surprised to find no mention of alcohol in the treatment of typhoid, except an allusion to its unintelligent employment by those who "stuff" their patients. He will find an explanation of the doctor's position on this question by turning to the latter end of the book, where there is a lecture on the "Therapeutics of Alcohol."

We next turn to the section on local diseases, and our attention is attracted by the appearance, under this head, of epidemic cerebro-spinal meningitis, acute pneumonia, phthisis pulmonalis, hydrophobia and sun-stroke; while erysipelas, diphtheria and carcinoma are treated under general diseases.

This of course is dependant on the author's views as to the etiology of these diseases. For instance, he is a disbeliever in the specificity of croupous pneumonia. Neither does he admit that the *bacillus tuberculosis* of Koch is the cause of phthisis. We would have supposed, however, that the diseased condition

known as acute disseminated tuberculosis might claim a place among the general diseases, even if its bacillary origin is denied. Its claim to be classed as a general disease is certainly as great as that of carcinoma. A strong argument might also be brought forward in favor of a similar classification for ordinary chronic phthisis, and, indeed, the author admits its dependence, in many instances at least, upon a previously existing diathesis.

He declines, with a conservatism which is somewhat too rare in these days, when all are striving after new things, to accept either Friedlander's pneumo-coccus or Koch's bacillus as the undoubted causes of pneumonia and phthisis.

The discussion of nervous diseases is entirely inadequate. In this respect, however, the book before us does not vary much from the other works on "Practice," unless we except that of Bartholow. Neurology has attained such dimensions as a specialty, its range is so great, its literature so immense, that we cannot expect any one but a specialist to treat it satisfactorily. The lecture on insanity is, at any rate, simple. It would be better, in the present writer's opinion, to omit the department of neurology from the text books on general medicine, excepting a description of some few diseases with which the general practitioner is liable to come frequently in contact.

In the lecture on *angina pectoris*, Dr. Davis calls special attention to certain causes of irregular cardiac action and neuralgia, which should always be looked for and eliminated, if possible. It seems to us that his remarks in this connection apply with greater force to the spurious anginas than to the genuine affection. But, in the latter, all such means as will improve the general health should be employed. Curiously, he does not mention the name of Lander Brunton, or refer to the general vascular spasm of angina and its relief by the nitrite of amyl, nor does he notice nitro glycerine, sodium nitrite, or the rapidly diffusible stimulants, with the exception of Hoffman's anodyne. The author states that the disease is, in the majority of cases, curable, which confirms us in the opinion that he confounds the true and spurious anginas.

We have only space to notice, finally, the lecture upon the therapeutic use of alcohol. The lecture is certainly well worth a careful perusal, as it contains the best argument against the employment of alcohol, either in health or disease, that we have ever seen. After giving the usual reasons for its avoidance by healthy people, Dr. Davis goes on to apply the same argument to the question of its value in the sick room, and sums up his conclusions by saying, "I have no hesitation, therefore, in stating that, for the attainment of the highest degree of success in the management of all forms of disease, whether acute or chronic, we need no form of fermented or distilled alcoholic drink." He excludes it, entirely, from his *materia medica*. He is, to say the least, consistent.

DISEASES OF WOMEN.

Kraurosis Vulvæ.

Mr. LAWSON TAIT, in his book on "Diseases of Women," says on this subject: The nymphæ are also subject to a peculiar degenerative and atrophic change, which occurs only at or after the climacteric period. It is a very distressing complaint, and one of the most intractable with which we ever have to deal. It is very often, but by no means always, associated with vascular caruncle of the urethra, of which I shall speak further on. This affection has been alluded to by Simpson, and various other authors, but no description which I have seen includes all the facts that may be observed in connection with it. It is always confined, in my experience, to the mucous membrane of the inner surfaces of the nymphæ, and it is never met with in the labia majora, or in the vagina higher than the vestibule. It is a very frequent cause of the total suspension of marital intercourse, and is the real disease existing in a large number of cases of so-called vaginismus, a term which is widely used as a cloak to cover ignorance and carelessness. A patient suffering from this disease will nearly always be found to be over forty years of age, and she will state that she has a slight yellow discharge, a good deal of scalding when she passes water, and that she suffers excruciating agony on any attempt at intercourse. This latter is always the first symptom in date; and when a case comes under the notice of the gynecologist it will generally be found that intercourse has been discontinued for many months, if not for several years. The misery is very great, and a great deal of the climacteric drunkenness, too common among women, is due to this disease. When

the labia are separated and an inspection made, one or two spots of redness on the mucous surface of the nymphæ will be observed, varying in color from a palish brick-red to a bright purple; and if these be touched they will be found to be exquisitely tender. If very carefully observed in a chronic case, these spots will be found to be very slightly below the level of the normal mucous membrane. If a case be watched for a long time it will be found that the spots are transitory and spreading, that after lasting for some months, the red coloring either entirely disappears from the spot observed, and comes out at another, or extends serpigiously, disappearing from the old site as it progresses toward the new. This process is very slow, but it explains the intractable nature of the disease, which is seldom content until it has passed over the whole mucous surface of the nymphæ. During its progress the vestibule of the vagina slowly contracts, until, as in the case of widow lady now under my care, it may be so reduced as barely to admit even the finger, though the patient has born several children. In her case the disease has been going on for nearly six years.

In one instance I was enabled to remove a fragment of mucous membrane, containing a patch of this vascular change, and I found it to display the pathology of this mysterious disease. I placed the fresh fragment in my freezing leptotome, and having stained the sections with hematoxylin, silver lactate, gold per-chloride, and carmine, I found that at the site of the spot all the textures had been removed save a few fibres, the walls of the capillaries, and the superficial epithelium, under which the loops of capillaries with thinned and dilated walls lay almost unprotected.

These obstructions explain the three chief clinical facts of the disease, the great pain, the abnormal vascularity of the spots and their tendency to bleed when touched, and the contraction of the surface in the third stage. It is, in fact, a progressive atrophy of the mucous membrane, the last textures affected being the blood-vessels and nerves; for, when the process has been completed, the pain ceases, the redness disappears, and nothing remains but a vestibulum vaginæ, so narrow that incredulity may be excused when the patient states that she has born children. I have been fortunate enough in two cases, one of which furnished the specimen described, to watch the complete course of the disease, almost from its commencement to its perfect recovery, and I have seen all the stages described. This experience is rare, because the patients suffer so much, and they see so little prospect of cure, that they generally wander about from one gynecologist to another, until the degenerative process works its own cure. Great relief is obtained, though only temporary, by the application of strong carbolic acid to the red spots. The acid is a powerful local anesthetic, and it never fails to mitigate the tenderness for a time. The application of a plug of cotton-wool, soaked in a saturated solution of neutral acetate of lead in glycerine, placed between the nymphæ at bedtime, is also generally successful in procuring some relief. The patient should always be informed that the progress of her disease will extend over years, that it will certainly get well in time, but that treatment from time to time will give her relief. She seldom retains this belief for any length of time, for it is the misfortune of gynecologists that the diseases they treat are generally so chronic in the course they

run, that the patients wander about and rarely give any one practitioner a very prolonged trial.—*Weekly Med. Review.*

A Case of a Rare Form of Vaginal Cyst.

DR. DAN'L B. D. BEAVER writes in the *Med. and Surg. Reporter*, as follows:

Miss S., æt. 18, of healthy appearance, was brought to me by her mother, about a protusion between the labia which had been there four years, and had caused some physical and much mental uneasiness.

Upon examination, there was found protruding from the vagina immediately below the urinary meatus, a soft, elastic tumor of the size of a large pigeon's egg. The vaginal mucuous membrane was freely movable upon it, but it seemed adherent to the muscular layer of the vaginal wall, with which it could be reduced easily to a position behind the neck of the bladder. From this position it relapsed immediately upon withdrawal of support, even while the patient was lying on her back.

There was neither pain nor tenderness upon pressure, in the tumor and the parts around it. Although there had not been any disturbance of the functions of the bladder, the proximity of the tumor to that viscus suggested the question of communication between the two.

Withdrawal of the urine did not lessen the size nor resistance of the tumor, nor could the end of the catheter be brought into close contact with its posterior wall.

It did not seem then to have any connection with the interior of the bladder; but yet there might have been a very small opening through which the catheter could not be passed, and which might have been so irregular and winding in its course, as to prevent the flow

of liquid into the bladder. To determine this point with certainty, the cyst was tapped with a very small needle trocar, and the removed fluid examined for characters which would distinguish it from the excretion of the bladder. This fluid was of a very light straw color, six drachms in amount, with a specific gravity of 1005, and heavily laden with albumen. The specific gravity of the urine was 1015, and it was free from albumen.

It was then clear that there was no connection between the growth and the interior of the bladder.

The cyst having been evacuated, the patient was told to return in two weeks, with the expectation of finding it considerably diminished in size.

September 29. The patient was etherized, and the cyst opened freely through the vagina. It contained about one drachm of liquid, and had shrunk to probably one-half of its former size. After having been opened, the cavity was packed with a dossil of absorbent cotton, which was previously saturated with tincture of iodine, and this retained in position by a larger cotton tampon in the vagina. The following day another application of iodine was made. Afterward pure carbolic acid was applied once a week until the cavity was entirely obliterated, a period of several months.

The pathology is equally obscure. Reindfleisch divides cysts into four classes: retention cysts, exudation cysts, extravasation cysts, and softening cysts. The first of these classes embraces such cystic growths as come from closure and dilatation of mucous follicles, or other of the granular structures in and beneath the vaginal mucous membrane. These are comparatively frequent, and after attaining moderate size assume the pear-shape—the mucous polypus. That

the tumor in this case did not arise from the granular structure of the vaginal mucous membrane is shown by its deeper attachment, by the free mobility of the vaginal mucous membrane upon it, by its form, and by the fact that it could be pushed easily up to a position behind the neck of the bladder, where it was practically out of the course of the vagina, and where, in all probability, its growth began and continued until it was driven to the vaginal outlet, the point of least resistance, by the weight of the overlying organs.

Although there is no history of an injury, nor of previously existing disease of the pelvic tissues, it probably arose either from exudation of serum, or an extravasation of blood between the deeper layers of the vaginal wall, or in the connective tissue between it and the bladder. According to Klebs, these cysts may arise from lymph vessels in the connective tissues. Winckel says they may be the result of œdema or hemorrhage into the sub-mucous tissues. Veit thinks they are sometimes the consequence of an abnormal development of the Wolffian bodies of foetal life.

The diagnosis of these cysts is sufficiently easy, especially in the absence of inflammatory complications. If it presents any difficulty it is encountered in determining the presence or absence of close connection with the pelvic organs. When the growth is in front of the vagina, as in this case, it is of course all important to ascertain whether it is free from the urinary passages before active interference is made.

The treatment of the disease involves the destruction of the cyst *in situ*, or its removal. The first method to present itself to the mind is the removal of the cyst in whole, as is done with those near the external surfaces of the body; but consideration of the dangers incident to

such procedure should lead to the use of milder means. Veit treated one case successfully by laying open the cyst, and stitching its wall to the mucous membrane of the vagina, along the whole line of the incision, thus turning the cyst to account by incorporating it with the wall of the vagina—a very ingenious operation in the case of insufficient vaginal surface. West treated his case by opening the cyst freely, and applying solution of nitrate of silver to its wall until it disappeared.

The Free Use of Caustic Potash in the Treatment of Cancer of the Cervix Uteri.

Dr. HERBERT SNOW read a paper on this subject before the Medical Society of London (*British Medical Journal*), in which he reviewed the statistics of extirpation of the uterus, and showed the severe mortality which followed the abdominal or the vaginal operation. In many cases the *écraseur* was unable to remove the whole of the disease of the cervix uteri. The actual cautery had too superficial an action to be of any great service. Chloride of zinc caused much pain and distress, which lasted for a long time. These objections did not hold with regard to potassa fusa. Half an hour or an hour was recommended to be spent in the employment of successive sticks of potassa fusa, for the treatment must be thoroughly carried out. None of the cases suffered from peritonitis; and unless the patient get up too soon after the operation, nothing distressing need be feared. All the cases were greatly benefitted, and no alarming symptoms were encountered. Fixation of the uterus and infiltration of the vaginal wall were regarded as prohibiting the employment of this method of treatment. It was only by degrees that he had ventured to apply the caustic so freely as he now

advocated. He illustrated the paper by narrating several cases in which the treatment had been adopted. The object of the paper was to show that potassa fusa could do all that the vaginal cutting operation could perform, without running the risk of the severe operation.—*Louisville Medical News*.

A Remedy for Endocervicitis.

DR. J. K. SHIRK writes in *The Practitioner*: "There is one condition of the cervix uteri which resists all ordinary methods of treatment. I refer to that obstinate form of endocervicitis, in which a discharge quite similar to the white of an egg is poured out in great quantities. In all forms of cervical catarrh this secretion is produced more or less, but in the form I refer to the glands are remarkably active and produce immense quantities of this discharge. As said before, the ordinary forms of astringent and caustic applications will not cure this condition. I have found but one remedy that will cure these cases, namely, an aqueous solution of chromic acid (3 j. to aqua ʒ j.). Four or five applications of this remedy at intervals of a week usually suffice." Another mode of treatment is to curette the glands.—*Jour. Amer. Med. Asso.*

A Case of Urethrocele.

Mr. SKENE KEITH thus writes in the *Edinburgh Med. Jour.*

A description of the following case will be of interest, in the first place, because the condition is not described in any book in the English language, with the exception of that of Dr. Skene on "Diseases of the Bladder and Urethra," nor have there been more than two or three cases recorded in British medical periodicals.

In April of last year, Mrs. S. consulted

Dr. Keith, and the local condition was found to be as follows : There was no perinæum ; the uterus was large, and the os came down to the introitus vaginæ whenever the ring pessary was taken out ; the wall of the urethra was enormously thickened, and projected considerably downwards. The base of the bladder was felt to be quite healthy. The passage of a catheter caused severe pain, and before its point entered the bladder some thick pus flowed from it. The urine was quite clear. The skin surrounding the vulva was red and sore, for although patient was most particular, and washed and dried the parts many times a day, a little pus, constantly oozing from the orifice of the urethra, kept the skin moist and irritated. Dr. Keith considered that the condition of the urethra was possibly due to its posterior wall having been pressed outwards by the large heads of the children, and as this condition was kept up by the loss of support due to the absence of all trace of a perinæum, he thought that it would be best to make a large, firm perineal body, which would press the dilated urethra upwards and forwards, and thus obliterate the pouch, which was constantly full of pus. The perinæum was repaired in April, but did not do what was expected. It simply supported the uterus, and took away a good deal of the pelvic pain. It became evident that the urethra itself would have to be attacked. Dr. Keith cut down, in the middle line, on a sound which had been passed into the bottom of the pouch, and made a large opening into the urethra. The wall was fully 1 1-4 inches thick, and the opening was made large enough to admit one finger easily. A large amount of pus came away when the incision was made. The lining membrane of the urethra was rough and of a dark purplish color. The

mucous membrane of the urethra and vagina were sewed together to prevent too rapid closing of the wound. There was not a very great amount of hæmorrhage. From the first night patient became more comfortable ; of course control over the bladder was not lost, as the incision did not reach back to the neck.

After four months, all pus and irritation having disappeared, the opening into the urethra, which, in spite of the original stitching together of the mucous membrane, was hardly larger than the point of an ordinary catheter, was closed with twelve horse hair sutures. The patient got up on the day after the operation. The stitches were removed on the ninth day, and she now sleeps the whole night through without having to get up, and during the day requires to micturate two or three times only. In addition, all pain is now gone.

There was not the slightest doubt that the urethra alone was diseased and prolapsed. When the uterus was not supported by a pessary, and lay almost outside the vagina, there was naturally some lowering of the bladder, but there was no condition at all approaching to cystocele ; and when the uterus was properly supported, the slight sinking of the bladder was removed. This did not, however, have the smallest effect on the swelling of the urethra. That remained, no matter what the position of the other pelvic viscera was. Direct pressure lessened the size of the swelling slightly by emptying the pouch. In most of the cases which have been operated upon, an oval piece of the urethra has been cut out, and the parts stitched together at once. When the lining membrane of the urethra has not become diseased, this is, without doubt, the proper method to adopt. In a case such as that of Mrs. S., such a plan

would probably not have been successful. By making a dependent opening, and thus preventing the retention of pus and ammoniacal urine, the urethra soon returned to its normal healthy condition, in the same way as a diseased bladder will become healthy after a vesico-vaginal fistula has been properly made to cure cystitis, the only difference being that a patient with an opening in the base of her bladder is always uncomfortable and disagreeable to her friends. With an opening into the urethra she is uncomfortable only when making water, as the labia minora are then not in a position to perform "the most modest of the uses ascribed to them."—*Med. and Surg. Reporter*.

The Treatment of Uterine Myoma.

During recent years no subject in gynecological surgery has attracted more attention or led to greater discussion than the treatment of uterine myoma. The nature of this affection, and the danger which has invested the various methods of treatment proposed for its management, have naturally divided professional opinion into numerous differences in regard to the methods of treatment to be employed. Many still hold to the opinion that myoma never kills by its size alone, and that the hæmorrhage which results from its presence may be controlled by various means without resorting to the extreme measures of an operation. It is claimed by these advocates that the palliative treatment may be successfully employed until the patient reaches the menopause, at which time the dangerous symptom, hæmorrhage, subsides.

Others hold that a small myoma should be removed before the health of the patient is endangered by its larger growth and distressing results.

Into the advocacy of the palliative or of the curative method of treatment experts in gynecology may be said to be divided. It naturally follows that grave reasons exist for such a divergence of opinion. These reasons must be influenced by statistical results which, after all, receive their coloring from individual experience. One surgeon has been successful with the palliative method, and hence advocates the let alone or Fabian policy. Another surgeon bases his experience on the results of operative procedures and, therefore, is a warm advocate of the curative plan of treatment. It is quite evident that a thorough investigation of the history of uterine myoma is yet needed before it is safe to follow the leadership of a single guide. An investigation into the history of myoma will show widely different conditions, and the plan of treatment must be modified according to the social conditions, habits and surroundings of the patient. The expectant treatment of myoma may succeed well with those patients in high life who can command all the ease and repose of wealth, but it simply means death to the working classes where complete rest is impossible. But whatever force the palliative methods of treatment may exert in quieting the terrors of a myoma, it is quite well understood that in certain cases an operation is imperatively demanded. The decision of this question leaves three procedures from which to make choice. Shall the operation be enucleation, hysterectomy or oöphorectomy? Each of these operations has its advocates and each has its special advantages which entitles it to consideration. Hysterectomy is a grave surgical procedure about which the most experienced and skillful surgeon cannot speak with enthusiasm. The mortality remains high and the operation is difficult. Enucleation has,

to say the least, a terrible mortality and has been condemned by as bold and skillful an operator as Mr. Lawson Tait. Oöphorectomy is the one operation entitled to the highest consideration. This operation has been highly favored by Mr. Tait in a recent paper read before the Obstetrical Section of the British Medical Association (*British Medical Journal*, Aug. 15, 1885).

Mr. Tait's arguments are very strong, and his statistics are entitled to very high praise.

It will be remembered that on August 17th, 1872, our distinguished countryman, Dr. Robert Battey, of Rome, Ga., successfully removed both ovaries for the relief of reflex nervous troubles. The object of the operation was to bring about a premature menopause. On Feb. 11th, of the same year Mr. Tait had removed the uterine appendages for the relief of pain and hæmorrhage. While the priority of the operation of oöphorectomy has been generally conceded to Dr. Battey in this country, it is quite evident that Mr. Tait's conception of the operation is the one now universally adopted. It is equally certain that Mr. Tait has presented statistics which no living operator can adduce, and that his operation for the removal of the uterine appendages is one which defies criticism. In the paper recently read by Mr. Tait, to which we will now give attention, he shows that removal of the uterine appendages for myoma, when properly performed, is not a fatal operation, but one with hardly any mortality at all, even when the tumors are large, and when the patients are brought almost to death's door by hæmorrhage. Mr. Tait presents a list of fifty-eight cases in which he has operated since January, 1884, without a single death. In the series published up to the end of 1883 there were fifty cases of removal

of the uterine appendages for myoma with but two deaths, making a total of 108 cases with two deaths. Mr. Tait believes that the real mortality of the operation in experienced hands is not more than one per cent.

The views which Mr. Tait formulates from his experience are entitled to great weight. The view that is so constantly asserted, that uterine myoma is not a disease which is at all fatal and therefore deserving of any kind of surgical treatment, Mr. Tait asserts is absolutely contradicted by the fact that every one in whose practice the disease occurs to a large extent is found to be engaged in discussing the alternate proposals of enucleation of the tumors or the performance of hysterectomy. Mr. Tait unhesitatingly condemns hysterectomy, and asserts that he never would perform it if he could possibly avoid it. In certain cases, he admits, the operation of removal of the uterine appendages does not arrest the growth of the tumor, and hysterectomy is subsequently demanded. Other cases will also demand it where the tumor has grown after the menopause. But Mr. Tait contends "that if the removal of the appendages were performed on the patients early in the history of these cases, as it ought to be, very few indeed would arrive at the necessity of hysterectomy." Mr. Tait closes his paper with this statement: "I think that the evidence which I have now laid before you, is quite sufficient to maintain the thesis with which I started, that removal of the uterine appendages is an operation with a low mortality; that it is extremely effectual; and that, therefore, it ought to take the place absolutely of the operation of enucleation, and ought to be employed for the purpose of reducing the number of cases of hysterectomy to the lowest possible point."—*Maryland Med. Jour.*

Diseases of the Fallopian Tubes.

Any cause which may produce endometritis may produce salpingitis by extension of the inflammation into the fallopian tubes. Gonorrhœa in the female is probably a very frequent cause of the disease. The sterility so universal among prostitutes is probably explained by the fact that gonorrhœa and septic endometritis, following abortions, are so common in this class.

Septic poisoning, following labor and abortions, especially the latter, is a frequent cause of this disease. By extension of the inflammation to the tubes, the fimbriated extremity may become closed, accompanied by a local peritonitis. Strictures of the tube may occur at various points, thus sacculating, as it were, the secretions of the mucous membrane. These may rupture into the peritoneal cavity, producing repeated attacks of local peritonitis. The character of the secretion, whether it be pus or semen, determines the accumulations as being pyo-salpinx or hydro-salpinx. Hydro salpinx may be produced by other causes than venereal disease, but the fact is not satisfactorily explained.

The symptoms from which to make a diagnosis are variable. The most constant is a peculiar burning pain over the seat of the affected tube. Many have only a local sensitiveness, and a dull, heavy, dragging pain over the region of the ovaries, with backache and headache, so commonly supposed to be associated with displacement. Displacement is a very constant accompaniment of diseased tubes, and often produced thereby.

Sterility is the rule in salpingitis if both tubes are diseased, and they usually are. If one is not, pregnancy may occur, but abortion is liable to follow, because of the adhesions of the tube upon the diseased side.

The most probable reliable symptom is the frequent occurrence of local peritonitis, or pelvic congestion, without any other good cause for such attacks.

An acute attack is not readily diagnosed. After rest in bed, and applications of pledgets of cotton, saturated with glycerine, to the cervix and vault of the vagina, two or three times a week, for several weeks, the inflammatory products will probably be so far absorbed as to render diagnosis possible by bimanual palpation. Salpingitis is said to be more frequently associated with antero-lateral displacements, than with retro-displacements, the adhesions formed tending to draw the organ forward and laterally. A small percentage, however, accompany retroversion; when only one tube is diseased, it is usually the left.

As the disease progresses, more commonly the tube becomes distended by fluid, assuming small or enormous dimensions. When the accumulation of fluid is large, the tube is usually convoluted and constricted at one or more points, the outer end ordinarily being larger than the inner end.

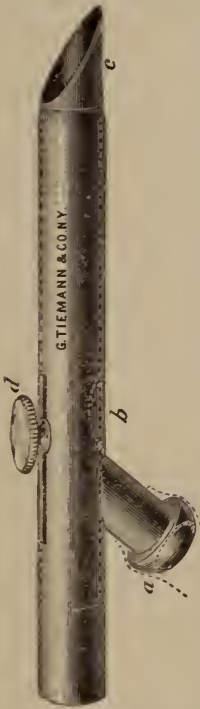
The fluid may be clear, milky, thick, greenish pus, or thin pus. Microscopical examination of the clear fluid shows its chief characteristic to be ciliated epithelium. When the tube is largely distended with few adhesions, it is usually a hydro-salpinx; but when many adhesions exist, the fluid is generally purulent—a pyo-salpinx.

Salpingitis always renders the patient an invalid. A pyo-salpinx ordinarily causes an almost constant state of partial septicemia, with slight fever and rise of pulse. A hydro-salpinx may at any time become a pyo-salpinx; therefore, operative procedure in undoubted cases is indicated. If the patient objects to laparotomy and removal of the

diseased appendages, tapping of the accumulation, if large, through the vagina, may be resorted to, perchance followed by complete recovery—perhaps not.—*Washington Journal of Medicine.*

A New Ovariectomy Trocar.

Dr. E. S. DUNSTAR : With a view of obtaining a less complicated as well as a less expensive ovarian trocar and canula, than the well known and excellent instruments of Sir Spencer Wells and the "Fitch dome," I suggested to George Tiemann & Co. to make for me the instrument illustrated in the accompanying wood cut engraving. The



drawing (which is of half size) shows so clearly what the instrument is, that no elaborate description of it is necessary. It consists simply of two concentric and accurately adjusted tubes, one sliding within the other, thus making a canula and trocar proper. The canula (*c*) is adjusted by the set screw (*d*), and has in it a fenestrum shown in dotted lines at *b*. When the cutting point of the canula is with-

drawn into the trocar, this fenestrum comes directly opposite the outlet tube (*a*), to which rubber tubing, at convenience, is to be attached. The instrument, in using, is held in one hand just like a pistol; the proximal end of it, which is capped with a solid convex plate, is placed in the hollow of the

hand; the middle ring, and little fingers grasp it in front of the outlet (*a*), while the thumb and index finger are free to fix or move the canula forward or backward as required by means of the set-screw (*d*). When the cutting point (*c*) is withdrawn into the trocar, there is no sharp edge or point which can damage the tissues into which it may be introduced.

The special advantages claimed for the instrument are : 1. It can be held and used with one hand alone, leaving the other hand free for the operator to use as may be required, while the grasp (pistol fashion) is so firm that the instrument is under perfect control; 2. the construction is so simple that the instrument can be cleaned and kept clean with ease; in these days of anti-septic surgery this feature in an instrument is an important consideration. By removing the inner from the outer tube every portion of both inner and outer surfaces of the instrument can be easily reached with a carbolized cotton swab, and there are no sharp angles, corners or crevices in which septic matter can lurk to do its deadly work by being carried into the tissues in operating. 3. It is, or ought to be, furnished at much less expense than either the Spencer Wells or the "Fitch dome."

The instrument is nickel plated and burnished inside and out. I have used it in several ovariectomies, and it works with perfect satisfaction. I would suggest that if made of various smaller sizes and lengths it will be found an excellent and handy substitute for the trocars in use in general surgery.—*Canada Lancet.*

On the Origin and Cure of a Colo-Utero-Vaginal Fistula.

Dr. A. BIDDER. It marks three chief periods in the history of his case : 1. Origin of an anus præternaturalis colo-

utero-vaginalis. 2. Transformation of the same into an intestinal fistula. 3. Operative closure of the fistula and removal of the remaining intestinal stenosis.

A woman æt. 22 had her first confinement in 1878. Three weeks later a left sided parametritis resp. pelvi-peritonitis was diagnosed. Some months later a tumor was made out in the uterus. The cervix was dilated and a soft tumor extirpated, which proved to be a 20 cm. long portion of the sigmoid flexure. There had been no symptom pointing to rupture of the uterus and invagination of intestine. Flatus and fæces soon passed by the uterus and a left-sided phlegmon of the recto-vaginal septum developed, with necrosis of the left vaginal wall, etc.

At the juncture of uterus and left vaginal arch a hole formed, through which the finger passed directly into the descending colon. A valve-like fold of the gut wall turned all the fæces into the vagina. Up to 1883 the various attempts at remedying the trouble proved futile.

B. first saw the patient in 1883 and operated that fall. To gain free access a retractor was applied to the left vaginal wall and the vaginal portion divided to the right. The front lip was drawn down and forwards, the other down and backwards. Two to three cm. of the gut wall was then prepared off from the uterus, the lip-shaped adhesion divided and vaginal and intestinal walls separated to a depth of 1-2 cm. The gut, freed all around, was folded into its lumen, whereby the upper edge covered the lower, somewhat like a valve dédoublement. The depth of the wound prevented the application of sunk sutures to the gut; however, the vaginal and uterine walls were brought exactly together with five deep sutures. Salicylic

acid to the wound and a tampon of iodoform gauze. On removing the remaining sutures five weeks later, the cicatrization was found complete. Not a trace of fæcal matter had entered the vagina since the operation.

For the very reason that the unnatural path had been closed by the operation an intestinal stenosis now made itself evident. A broad sack like transverse fold formed, with its base at the left pelvic wall and its edge near the uterus. Under guidance of the finger in the rectum he pushed a curved trocar through the base, drew a rubber cord after it and over the free edge of the duplicature and tied it. By the next day it had cut through. A severe pararectal inflammation followed, on abatement of which the stenosis was gone and the fæcal passage free. Everything remained well until January, 1885, when, without any known cause, a fresh subacute inflammation of the pararectal tissues set in. From this she is now convalescent.—*Annals of Surgery*.

A fully analogous case was not found in the literature.—*Rept. of Germ. Surg. Congress in Centbl. f. Chirg.*

Congenital Lateral Deviations of the Uterus and their Relations with Peri-Uterine Tumors, and the Mechanism of Labor.

PROFESSOR LAZEREWITCH, in a contribution to the *Annales de Gynakologie*, wherein he discusses congenital lateral deviations of the uterus, and their relations with peri-uterine tumors and the mechanism of labor, sets forth the following propositions:

1. *Congenital retro-position* of the uterus depends upon the shortening of the sacro-uterine ligaments. In this position of the uterus readily originate:
a. Anteversion or anteflexion. *b.* The location of tumors behind or above the

body of the uterus. *c.* During pregnancy and confinement deviation of the neck of the uterus behind or above, and sacciform dilatation of the anterior wall of its lower segment. *d.* During recovery after confinement anteversion and retroversion are very pronounced.

2. *Congenital ante-positions of the uterus* depend upon shortening of the anterior wall of the vagina. In this position of the uterus there occur frequently: *a.* Version and flexion of the organ posteriorly. *b.* The occurrence of tumors anterior to the organ. *c.* During pregnancy and confinement deviation of the neck of the uterus before and above, and sacciform dilatation of the posterior wall of its inferior segment.

3. *Congenital lateral displacements*, right or left, of the uterus, depend upon failure in the development of the broad ligament, the ligament of the ovary, the sacro-uterine ligament, or upon failure in the development of the wall of the vagina, by which the uterus is brought into a closer relation with the pelvis. Lateral deviations of the uterus dispose: *a.* To lateral version and to lateral flexion of the organ. *b.* To a condition in which tumors may occur before or behind the uterus. *c.* During pregnancy or confinement to a latero-version of the uterus, and to unilateral sacciform dilatation of its lower segment. *d.* During the sequelæ of confinement to latero-version of the uterus.—*Medical News.*

Myrtle for Leucorrhœa.

An ounce of the leaves of the common myrtle, boiled in a litre of water, and used as an injection, is often valuable in the treatment of leucorrhœal discharges. It is very fragrant and agreeable. The common myrtle was highly esteemed by the ancients, who dedicated

it to Venus, and wreathed their bloodless victors with its leaves. The buds and unripe fruits were used as spices, and in the manufacture of a once celebrated perfume called "Eau des Anges" (angel water).—*Medical World.*

DISEASES OF CHILDREN.

Infantile Diarrhœa.

Dr. HOWARD writing to *Conn. Record of Medicine*, says in conclusion: First, we must remove all offending matter from the alimentary canal and skin. Baths often have to be prescribed and urged upon them, as the nurse and parents have an innate dread of the child taking cold, thus failing to properly bathe it. Brisk friction, by its influence upon the circulation of the skin, frequently renders splendid results, as an adjuvant to other treatment.

Calomel, ol. ricini, rhei pulv. and magnesia sulph., either, if properly selected, will render good results in the removal of the offending matter from the alimentary canal. If the diarrhœa has been of long standing, a mild astringent will be of service. Sub. nit. bismuth will often render good service, both, from its antiseptic properties and soothing qualities. We must assist, by aid of physiological knowledge, the digestion of the infant. This is where we will frequently find ourselves at sea, but by perseverance and careful attention we can render more assistance in this than in any other part of the treatment.

Usually, unless we do assist digestion, all previous treatment is useless. Pepsin and hydrochloric acid, perhaps, are of most advantage and should be given immediately before meals. Pepsin alone often fails, on account of the alkaline condition of the secretions of

the stomach. If there be much tympanites, ol. sassafras in minute doses will correct it. Iron is of great advantage in these diseases, given in very small quantities, and largely diluted. Bitter tonics are not well tolerated and are quite objectionable to the infant. We should exercise discretion in the preparation of our medicines for children, as the bitter taste is not tolerated by many of them. A physician that practices by routine is a *bad hand* to treat children, and is liable to do much damage. Each individual case demands our careful attention and most earnest study if we would succeed.

Treatment of Scarlatina.

In an exhaustive article by Dr. LEUF, published in the *Arch. Pédiatries*, speaking of Antipyrine, he says:

Antipyrine is a drug lately come into vogue. It is an analogue of quinine, and a synthetical product, first produced by Dr. Knorr, of Erlanger. It appears to be a spinal and vascular stimulant, causing muscular spasm and a rise in arterial tension. Its special value consists in the certainty with which fever can usually be controlled by its administration, without any customary bad after effects. Several cases have been reported in which this drug seemed to have a depressing effect upon the heart, and to an alarming extent, yet all the patients recovered from these symptoms. Antipyrine may be given every fall of temperature usually begins to take place in half an hour after the ingestion of the first dose, if it be a full one. The half hour in doses varying from fifteen to thirty grains, until the object for which it is administered has been attained. A dose given is for adults, and must be diminished when applied to children. I have used it continually for days, in five

grain doses every hour, in the case of a child between five and six years of age. Cardiac stimulants, as digitalis, may be combined with it if indicated.

Dr. R. G. Eccles, of Brooklyn, discovered a chemical incompatible to antipyrine in sweet spirits of nitre, for if both are combined, although forming a colorless liquid at first, a blue color gradually develops until the whole liquid assumes a deep blue hue. The depth of color and the rapidity with which it forms depends upon the amount of antipyrine in solution. From the tarry odor of the drug, its coal tar origin, the like extraction of the analines, and the analine-like difference in the appearance of the liquid when viewed by transmitted light as compared with its appearance when seen by reflected light, it was suspected that the color was due to the formation of a blue aniline. Investigation proved this to be true, so that the admixture of antipyrine to sweet spirits of nitre, results in the formation of a blue aniline.

Retention of Urine in a Child Six Months Old.

M. ARNOZAN relates in the *Journal de Médecine de Bordeaux*, the case of an infant, six months old, in apparent good health, who was suddenly seized with retention of urine. Previous to this time he had always passed water without difficulty and in sufficient quantity. No urine passed for thirty-six hours, although the child made ineffectual straining efforts. The bladder could be felt as a tense ball in the hypogastrium. The testicles were drawn up into the abdomen and could not be felt in the scrotum, but nothing abnormal could be discovered to account for the retention of urine. The water was drawn without difficulty through a filiform elastic catheter. There were about

four ounces of clear though dark colored urine. The child was put upon small doses of potassium bromide, and after the water had been drawn for about twelve days, it began to flow normally, and has since continued to do so, though the child has always a temporary difficulty in urinating whenever he is a little indisposed.—*Medical Record*.

Nasal Polypus in an Infant.

M. KRAKAVER exhibited before the Belgian Academy of Medicine a child who, when only four and a half months old, was brought to him on account of a trouble of the nose. He removed twelve polypi from the right nasal fossa, cauterizing the mucous membrane with nitrate of silver. Mackenzie states that the youngest child whom he had seen affected with nasal polypi was sixteen years old, and Semon mentions having observed one twelve years of age. The case reported by M. Krakaver would therefore seem to be exceptional as regards the age at which the disease appeared.—*Revue Médicale*.—*Ibid*.

Vaccination for Whooping Cough.

This measure, empirically proposed many years ago, has been revived by DR. F. W. ENTRIKIN, who, in the *Cincinnati Lancet and Clinic*, says :—

I have vaccinated, for this purpose, several hundred children, and almost always with happy results, usually a speedy cure. During the many years I have been familiar with the practice, I have found no reason to discard it. I have frequently seen it recommended in medical journals. I think it best to give the usual treatment until the febrile stage has passed, then vaccinate. The new disease set up by the virus will then usually arrest the nervous and other distressing symptoms.

Quinia by Inunction.

DR. WM. W. MOORE, says in *Peoria Medical Monthly* : About one year ago I was called to see two children, one five and the other seven years of age, both suffering with malarial fever of a remittent type. I prescribed calomel and podophyllin in small doses every three hours until free catharsis was induced, alternating with liberal doses of quinia. The little five year old boy took his medicine without any grumbling, but the combined force of her parents, supplemented by the nurse's and my own efforts, failed to make the little seven year old girl swallow the medicine. While thinking about the advisability of a blister sprinkled with quinia, the thought obtruded itself, "Why not try inunction?"

Calling for some lard I incorporated a large quantity of quinia with it, at least three or four times as much as I should have given her in twenty-four hours, with directions to rub one-eighth of the mass thoroughly every three hours over the abdomen and inner surface of the thighs. I should have stated that the symptoms in the little girl were of far greater severity than those of her brother. I left promising to be there at the same hour the next day.

Judge of my surprise, when upon my return I found the patient without fever and getting along nicely. I prescribed the same treatment for the next twenty-four hours. I found her little brother with fever yet, although the remission was well marked. I went back on the third day and found the little girl convalescing rapidly, while the little boy, who continued to take his medicine *per oram*, ran on until the fifth day before his fever "broke." I have had occasion twice since then to resort to the same method, each time with like result, although not quite so promptly.

OBSTETRICS.

Malaria and Pregnancy.

We are indebted to Dr. D. E. KEEFE, of Springfield, Mass., for notes of three cases of intermittent fever complicating the latter months of pregnancy, and in which gestation was not interrupted by full doses of quinine. The maximum dose of quinine, however, did not exceed thirty grains, and that was given but once, the subsequent daily dosage amounting to ten or twenty grains daily. The Doctor holds that, with rare exceptions, pregnancy is never cut short by either the disease or the drug. Yet he uses fifteen grain doses of quinine in the second stage of labor to rouse the flagging pains by its "tonic effects."—ED.

Puerperal Convulsions Without Albuminuria.

Dr. N. VUCCINO, of Rodosto, writing in the Constantinople *Gazette Médicale d'Orient*, gives the case of a lady usually enjoying excellent health, except for occasional hysterical attacks, who in the fourth month of her first pregnancy was seized with a severe frontal hemicrania of quotidian type. At the end of the sixth month she was awakened one night with intense pain in the head, followed by a slight convulsion affecting the upper extremities. In the morning the writer found her suffering from general convulsions, consciousness being lost, and a bloody froth issuing from the mouth; the pulse was small and hard; but the urine was then, and continued to be, perfectly normal. Various methods of treatment having proved fruitless, it was decided to bring on the labor, which was done by injecting hot water (32°). After this had been continued for three hours and a half, the os uteri became fully dilated, and a dead

child was shortly afterward expelled. The convulsions ceased as if by magic, and in twelve days she was able to resume her household occupations. She afterwards enjoyed good health till the eighth month of her second pregnancy, when convulsions reappeared with greater intensity than before. Chloral and chloroform proving inefficacious, the continued hot vaginal douche was again employed. In consequence of the irregularity of the contractions of the uterus forceps were required. The convulsions ceased five hours after delivery, and in seventeen days she was again in her normal condition. She subsequently became pregnant for the third time, and during the second month suffered from some premonitory convulsive symptoms, which were increased by vaginal examination; these came to an end on the patient aborting. The author considers the case interesting, as showing how convulsions, due, as he believes, to a highly nervous condition of the uterus, may simulate those connected with renal and urinary mischief. — *The Lancet*. — *Medical News*.

Nurses' Sore Mouth.

In all cases of nursing sore mouth, there may be found, upon careful inquiry, wrong of the uterus. There is nearly always more or less leucorrhœa, and the discharge is frequently of an offensive irritating character. The internal administration of eupatorium, alternated or combined with hydrastis, will always help in such cases, and they will many times accomplish everything desired.

R.—Mother tincture eupatorium aromaticum, 3 ij; fluid hydrastis, 3 ij; water, 5 iiss. M. Sig.—One teaspoonful every hour.

It is surprising to see how rapidly some cases of nursing sore mouth heal under the influence of this simple pre-

scription. The burning mouth and tongue are cooled; the leucorrhœal discharge is modified, lessened, and not infrequently entirely stopped; and the nervous element of the disease, characterized by morbid watchfulness, throbbing headache, etc., is perfectly controlled in most cases. Eupatorium is said to be a remedy for nervousness, but we have never observed that its virtues were very marked in this regard, except in this terrible disease, so frequently met with in nursing women, but here it certainly is a first-class remedy.—*Am. Med. Journal.*

Placenta Previa.

Dr. E. G. EDWARDES, London: In conclusion, I recommend, when head presents, to separate the placenta from os uteri all around as far as you can reach, if labor has commenced. Then, if possible, detach the placenta on one side completely, so as to allow you to reach the membranes and rupture, to give ergot by the mouth or ergotin by hypodermic injections, and use a little pressure over uterus externally. In most cases as the water discharges the head descends, thereby plugging, by pressure on the placenta, so thoroughly as to check the hemorrhage. I am in the habit of emptying the bladder by a catheter and having forceps on hand, and a roller bandage around the abdomen in order to give external support if required, and holding a plug against the os with my hand if the flooding is severe. I had no occasion to use forceps in any case of placenta previa so far.

Respecting turning, I should, in cross birth, carefully try to turn by manipulation by finger in the vagina and external assistance.

I might here state that I have thus succeeded in cross births, lowering the

shoulders, raising the hips and so bringing the head, feet, or breech down. I see no reason why we should not try, especially in cross births, in cases of placenta previa.

My advice is never to introduce the hand through the placenta and thereby gain entrance into the uterus for the purpose of turning, for thereby violence is sure to follow. In fact I am not an advocate for turning by introducing the hand into the uterus under any circumstances, unless all other means fail; as I consider that procedure very injurious to the mother and very apt to be followed by shock or by inflammatory action of some kind. Possibly in some cases, no other mode is practicable, and it must then be had recourse to. Respecting plugging, I have always succeeded in arresting hemorrhage by this means, giving thereby safety and time. It likewise stimulates the uterus, and the os is found more dilated. I would not give ergot unless I knew the bladder was empty, the parts proportionable, the os dilatable, and instruments at hand. Flooding nearly always relaxes the os. My rule in giving ergot is first to make sure of head, feet or breech presentation, with some pain, and in cases in which I have decided to deliver at once. Ergot would only increase the mischief in placenta previa, unless it was given to assist your efforts at the time of expulsion of the child.

Respecting hot drinks, I am aware that cool or cold drinks are generally recommended in cases of flooding. I do not, however, believe in giving cold drinks in shock or great depression. Opium, in small doses, as a stimulant, I hold very valuable in floodings, and large doses in the cases requiring the plug, to give rest and sleep when time for rallying is necessary.

I am of the opinion, if there has been

great loss of blood, that the sooner you deliver the better, provided the hemorrhage continues, and there is pain, and the patient not too weak ; but you should not introduce the hand into the uterus if you can possibly avoid doing so, always giving an anæsthetic when you do. I put emphasis on this latter—anæsthetic (ether or chloroform). My practice and advice is, in all severe midwifery operations, to give one or the other. My reasons for thus advising are :

1st. It is humane and prevents unnecessary suffering.

2d. By its use depression and shock are lessened, if not prevented altogether.

Allow me here to say that I, at any rate, have not, neither do I intend adhering to the old traditional theories and procedures respecting the use of anæsthetics in midwifery.

In conclusion, following up turning in cases of placenta previa, the only argument I can conceive justifying it when the head presents, is the speedy delivery of the child in order to save its life, but how often will we be disappointed in this, as it is well known where some floodings have taken place the child is usually born dead. To compensate for that, by plugging and waiting, the shock of introducing the hand into the uterus will be avoided and the maternal parts not injured. I believe the time is not far distant when turning, by introducing the hand into the uterus, will be the exception, not the rule, as at present.

I have adopted a procedure of my own, viz., when called to a case of placenta previa near the end of pregnancy, when flooding is in progress, with the pains continuing and the patient not too weak or exhausted, to separate as much of the placenta as I can on one side, detaching a portion of it completely from one side, bringing it down into the va-

gina ; and if the os is not well dilated, and the pain continuing, to squeeze the detached portion between my fingers, or to press it firmly against the opposite side until the os dilates ; then I give ergot and rupture the membranes, still pressing the detached portion of the placenta until the head descends sufficiently to check the hemorrhage.—*Med. Age.*

Suspected Pregnancy.

In a clinical lecture published in *Med. & Surg. Reporter*, DR. GOODELL said : As a rule, we cannot *swear* to pregnancy until we can hear the fœtal heart-sounds ; but there is strong presumptive evidence if the os is soft like one's lips. When the os is as hard as your nose, you may be reasonably sure that there is no pregnancy. Once in a long time, a fibroid tumor will give us a soft os and cervix, but this is very exceptional. This condition we will find as early as the end of the first month, though it becomes more marked as pregnancy is farther advanced. Here there is a little softening, but very little. Her abdomen is too fat to circumscribe the womb and discover whether it is enlarged, so that evidence is here lost. There is only a shade of darkness about the nipple, not as much as there ought to be in pregnancy. This woman may not be pregnant, and may be suffering only from amenorrhœa. We will give her Bland's pill : *R.* Dried sulphate of iron ; carbonate of potassium, $\text{āā } 3 \text{ ij.}$; glucose, *q. s.* *M. ft. pil., No. xlviij.* *S.*—Two thrice daily for one week and then increase one at each dose.

If she is not pregnant, this will bring on her menses ; while, if she is pregnant, it will not cause a miscarriage. Remember a *natural* abortion is not very dangerous ; for some reason the ovum has become detached from the womb, and it passes harmlessly away.

BOOK NOTICES, ETC.

OSTEOTOMY AND OSTEOCLASIS.—By Chas T. Poore, M. D., etc., etc., Published by D. Appleton & Co., 1, 3 and 5 Bond street, New York.

This short work of 187 pages is very creditable, typographically, being finely printed in large, clear type, with leaded lines, on heavily calendered paper. The preface is modest and concise. In it, the author takes special pains to give full credit to all who seem to him to have a claim to his indebtedness. Then follows a table of contents, comprising ten chapters, a bibliography, and an index. Next appears a list of fifty illustrations and five additional plates.

Chapter I. treats of "The Relations between Rickets and Certain Deformities of the Limbs," in which is given a brief, but good outline of this condition. The author speaks of the first seven years of life as being most apt to result in deformity from bending of the long bones, which are then rapidly developing. The period extending from the seventh to the twelfth year, he considers as seldom growing deformities. The third and last period extends from the twelfth to the twentieth year, when the ends of the diaphyses undergo rapid development and become united to the epiphyses, and is marked by articular deformities, especially of the knee, in those who labor hard to fatigue. Stress is laid upon the necessity of correcting deformities by proper apparatus during the soft stage of the disease, and of the inevitability of osteotomy when it has progressed to the hard stage. It is to be regretted that osteomalachia has not been alluded to in this chapter, where it certainly seems to deserve a place.

Chapter II. is on "Osteotomy." He first gives an historical resumé of the operation, and here we regret to report two errors. Ashley should be Astley, and there should be no comma after Warren. Both mistakes are on page 11, line 3, from below. Instruments are next very critically considered, and rational preference given to the osteotome over the saw, even with Shrad's modification and cannula. Noteworthy is the fact that the author has abandoned Listerism as worthless,

and we heartily agree with him. Simple osteotomy is first taken up, and the necessity of using the osteotome and not the chisel in this procedure is maintained. The edges of the wound are held in apposition with a strip of adhesive plaster, narrow enough to leave uncovered both ends of the incision. So successful is the author in this treatment, that it would be supererogation to deery it. Cuneiform osteotomy should be performed with a chisel and finished with the osteotome. A ready method is given to estimate the size of the wedge to be excised. In conclusion, the erroneous idea is still largely prevalent, about an osteotomy being actually a compound fracture, is tersely and effectually negatived.

Chapter III. is on "Osteotomy for Deformities of the Hip-Joint," grouped under hip-joint disease, rheumatism, unreduced dislocation, and fractures united at an angle. The word *inward* is used to designate forward curving of the spine, and is not so appropriate or consistent a term as forward or anteriorly. Forcible straightening of a hip-joint that has been the seat of suppurative coxalgia is allowed "under *no circumstances*," an opinion with which we do not fully concur, as there are exceptional cases, when such a procedure is not "unwarrantable." The subject is historically considered, and the lines of section advised and practised by various surgeons illustrated. Interesting and instructive statistics follow, from which it appears that in the 167 cases reported, there was a mortality of 10.18; but as the author shows, this is much too high for the present day, as most deaths occurred during the earlier years of the operation, when it was not so well done as now, and the cases poorly selected. Adam's line of section (through the neck), is limited in its applicability, depending upon the amount of destruction of the upper end of the femur. Gant's line (below the trochanters) is preferred, because it is furthest removed from the diseased bone and is below the ilio-proas. The necessity of operating through as healthy bone as possible is emphasized. The advantage of section through the trochanters in facilitating cuneiform excisions receives its proper valuation—they

are considered to be generally unnecessary. Dr. Stephen Smith's double angular section is condemned as worthless, an opinion which we feel compelled to endorse. Pain at the seat of ankylosis is considered a strong counter-indication to an operation. Two cases reported by Dr. E. M. Moore and Dr. H. R. Wharton, in both of which post-mortem examinations were held in consequence of death from other causes than the operation, are dwelt upon at length, and handsomely illustrated by two plates each. The second plate, however, does not convey any clear idea of the condition of the parts, and is in all probability due more to the conformation of the specimen than lack of artistic skill. Long side splints and extension are preferred, and plaster of Paris condemned as "the worst dressing that can be used." Under a sub-heading of accidents, several interesting cases are mentioned. Then follow two illustrative cases operated upon by the author. He cautions against much manipulation and advises continuous extension for the purpose of rectifying the flexion and adduction without pain or irritation. He is not a believer in false joints.

Chapter IV. is on "Genu Valgum; its Etiology and Pathology." True genu valgum is carefully described. The three theories as to the cause of knock-knee (ligamentous, muscular and osseous), are considered, and the osseous one, of course, supported. Three varieties are recognized—femoral, tibial, tibio-femoral. The femoral variety may be due to increase of the internal condyle, to bending of the lower part of the shaft, to decrease of the external condyle. The same rule may be applied to the upper end of the tibia, but is not definitely stated by the author. Genu valgum is said to be developed during the first five years by rickets; during the next seven years it rarely happens; and it again is a frequently occurring deformity from the twelfth to the twentieth year, and due to constant mechanical causes acting during very rapid growth. We feel compelled to stand by the doctor in his doubt about spontaneous cures in this affection, although not denying its possibility in very slightly marked cases occurring in infants. The symptoms are necessarily meagre, though marked. Not much time is consumed in their consideration. The treatment is mechanical and operative. The mechanical meth-

od of cure is by splints if the epiphyses have not yet become united to their shafts. If the internal condyle is still soft, the author favors the plan of forcibly maintaining the leg in its proper angular deflection and allowing the weight of the body, in walking, to compress the internal condyle against the head of the tibia and thus cause its partial absorption. These modes of relief are not very certain or successful, and should not be tried too long. The operative treatment, as regards sections of muscles and ligaments, is justly condemned.

Chapter V. is on "Osteotomy for Genu Valgum." It begins with a brief historical resumé, after which "operations upon the condyle" are considered. Ogston's, Reeves's, Chiene's and Macewen's operations are dwelt upon. The danger of genu varum resulting from an operation is pointed out; it may be due to the operation or a subsequent change in the bone if the epiphyseal cartilage has been involved in the section. The preference is given to Reeves's procedure. In speaking of "operations on the shaft," he speaks of the methods of Macewen, Barwell, MacCormac, Taylor and Reeves. Barwell's triple osteotomy (of femur, tibia and fibula) is rejected as only of occasional applicability, while the preference is given Macewen. He performs Macewen's operation, less three modifications, that is, Listerism, the dressing of the wound, and the position of the limb,—and his description of the mode of procedure and his reasons for deviating from the original method are excellent. Sections of the tibia are, unfortunately, only incidentally considered. "Cases," appropriate for osteotomy" is the next heading, and here the author claims that "*nutrition*," and not age, must decide whether the bones are hard enough for section, or so soft that the deformity may be corrected with splints. He is strongly inclined to operate in all cases unless the improvement from the use of splints is rapid, nor does he consider the operation a serious one, if properly performed. Plate V. beautifully illustrates a section of the lower end of the femur removed from a case of Dr. A. T. Cabot, dead of typhoid fever six weeks after Macewen's section. *Results* are next tersely mentioned and followed by remarks on *suppuration*, and this he considers as always an accidental complication due to some unforeseen cause. The operation is then statistically considered in a general way, and later

specifically, as regards the different methods. Four illustrative cases end the chapter.

Chapter VI., on "Genu Varum," consists of only two pages of reading matter. We consider it much too short.

Chapter VII. treats of "Osteotomy for Ankylosis of the Knee-Joint," which he considers under: 1st. Operations upon the femur; 2d. Upon the tibia; 3d. Upon the femur and tibia; 4th. Upon the joint itself. Each division is tersely treated. Preference is given to Buck's cuneiform resection, and we think the author is right.

Chapter VIII. is on "Osteotomy of Tibial Curves," and are classed as rhachitic, traumatic and pathological. He is not satisfied that muscles are necessary factors in the production of these curves. An interesting hystero-statistical resumé of the recorded cases of the three varieties is given. The mechanical treatment of this condition is based upon the same condition as in knock-knee. Osteotomy should always be performed at the site of greatest curvature, and "in all cases the fibula shall be divided first." It is best not to sever the tibia completely, but to end the section by fracture, so as to avoid cutting the anterior tibial artery. Section of the tendo-Achillis is often necessary in operation for anterior curvature. His experience teaches that suppuration is to be expected and counter-openings made just in proportion as the bone operated upon is nearer the skin, and this because a slight collection of fluid will cause tension and interfere with proper coaptation. The subject closes with a note on complications, and two illustrative cases.

Chapter IX., on "Osteoclasis," contains a good description of "*redressement brusque*," and this, we believe with the author, is a procedure that has justly seen its best days. Osteoclasis is performed for the correction of deformities after fracture, the straightening of ankylosed joints, and the correction of rhachitic deformities. Rizzoli's apparatus is employed by the author, who briefly, but lucidly, explains the way it is to be used. It never injures the skin and always fractures at the point of pressure and the break is invariably transverse. The author prefers osteoclasis in all well-marked angular curves in long bones, if not too near the epiphyses. This chapter includes a description of two osteoclasts (those of Collin and Robin), with

an illustration of each, and ends with two cases, also illustrated.

The closing chapter (X.), treats of "Statistics after Osteotomies," and here the author informs us that he has performed seventy-four linear, and seventeen cuneiform osteotomies. In his seventy-four cases, he had eight of suppuration, and in the seventeen he had seven. He has performed osteoclasis upon thirty-four limbs for lateral curvature of the tibia, and all terminated satisfactorily without complications. An analysis of 1,510 cases shows that 1,448 were linear and resulted in fifteen deaths, ninety-two suppurations and seventeen necroses—mortality, .010 per cent. Sixty-two were cuneiform, of which five died, 17 suppurated—mortality, six per cent. Total mortality, .0132 per cent. He claims in his last sentence that "if the earlier operations were left out, the mortality would be reduced to almost zero."

The "Bibliography" is varied and full, being composed of 244 references. The "Index" is ample for the size of the book, but is by no means too full.

We must accuse the author of not having a more consistent nomenclature than is generally found, and for which we had hoped. The word rhachitis, too, of which there was so much said in a well known medical journal quite recently, should be spelled rhachitis, and not rachitis. We are well aware of the fact that a reference to Dunglison or to Webster, for instance, will seem to justify the author's rendering of the word, but custom is sometimes wrong. The *r* in the Greek word is marked with an aspirant, as it is in *rhetoranche*, *rheumatism*, *rhinology*, *diarrhœa*, *gonorrhœa*, *bronchorrhœa*, etc., etc, along a great list, and yet no one omits the *h* from these words. To preserve the beauties and simplicity of a language, it is requisite to render roots, derived from other languages, in their original form so that the true meaning may not become perverted or the origin of a word lost.

The tone of the book is excellent, and the author conveys the impression that he is a man of sense and experience. It is refreshing to note his condemnation of Listerism. It is time that this absurd extremism should no longer be upheld by men who are usually credited with good judgment.

In conclusion, we heartily recommend this work to all who can buy it, and we believe that no surgeon should be without it.

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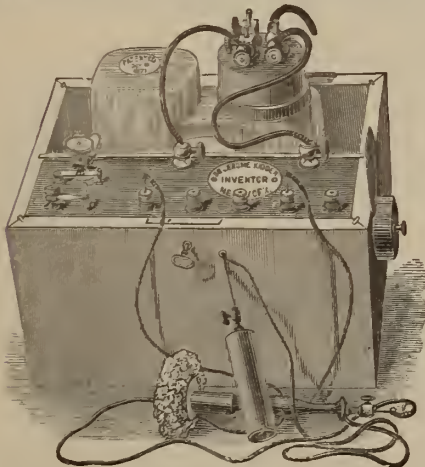
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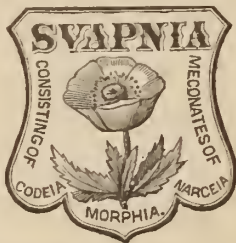
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